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THE LANGUAGE OF BOTANY.

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THE

LANGUAGE OF BOTANY:

BEING

A DICTIONARY

OF THE

TERMS MADE USE OF IN THAT SCIENCE,

PRINCIPALLY BY LINNEUS:

WITH

FAMILIAR EXPLANATIONS,

AND AN ATTEMPT TO ESTABLISH

SIGNIFICANT ENGLISH TERMS.

THE WHOLE INTERSPERSED WITH

CRITICAL REMARKS.

By *THOMAS MARTYN*, B. D. F. R. S.

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M.DCC.XCIII.

TO

JAMES EDWARD SMITH,

DOCTOR OF PHYSIC, FELLOW OF THE ROYAL SOCIETY, PRESIDENT OF THE LINNEAN SOCIETY, &c. &c.

DEAR SIR,

THE following GLOSSARY would probably never have appeared in print, had it not been for the favourable reception which an imperfect eſſay on the ſame ſubject met with from the Society over which you ſo ably preſide; and the encouragement which I had to proceed from ſome converſations that have paſſed between us; wherein I found that you did me the ho-

nour to approve of my principles in general, and that we differed as little in particulars as two men who think for themſelves can well do on any ſubject, that branches out into ſuch a variety as this.

To you, who know ſo well the difficulties that attend on accuracy and preciſion, there needs no apology for the errors and imperfections of the work that now preſumes to claim your protection. The great and extenſive taſk which I am now endeavouring to bring to a period, has not left me leiſure to uſe the file: and the ſubject will probably continue in its preſent rude ſtate, till you, who have obliged the public with a handſome and correct edition of the moſt elegant among our great Maſter's works, ſhall find time to gratify them ſtill farther, with an enlarged and

corrected edition of his *Philosophia Botanica*; which is certainly one of the most useful of them, and may be considered as the corner stone of all the rest.

You, Dear Sir, are happy in the praises and good wishes of every one who has occasion to consult any part of the Linnean Collections, which so fortunately for the public have fallen into your hands: and I may venture to say, that my brethren of the Linnean Society will heartily concur with me in my good wishes for your health and prosperity, as well as for your long continuance in a station which gives you the opportunity of rendering important services to Natural History.

I flatter myself that you will take in good part this public testimony which

which a veteran in our Science bears to your worth and abilities: and that you will permit me to subscribe myself,

Your very sincere Friend,

And

Obedient humble Servant,

THOMAS MARTYN.

Park Prospect,
Feb. 8, 1793.

PREFACE.

MY attention was first called to consider the LANGUAGE of BOTANY, very soon after Linneus had published his Fundamental Treatise*. At that time I was a pupil in the school of our great countryman Ray. But the rich vein of knowledge, the profoundness and precision which I remarked every where in the *Philosophia Botanica*, withdrew me from my first master, and I became a decided convert to that system of Botany which has been since generally received.

Being then engaged in academical studies, and afterwards in those of the profession which I had determined to adopt, Botany was rather the amusement of leisure hours than the object of serious pursuit, till the institution of a Botanic Garden at Cambridge by Dr. Walker, and the

* In the year 1751.

desire

desire which my father expressed to resign a chair which his age and infirmities rendered him unable to fill with satisfaction to himself, roused my attention a second time to a favourite pursuit.

Having been appointed by the unanimous voice of the University of Cambridge to the Professorship of Botany; and being soon after nominated by Dr. Walker, the founder of the new garden, his first Lecturer; I had the felicity of taking the lead in introducing the Linnean system and language to my countrymen, by a course of public lectures*. They were at that time both entirely new to the University, and very little known or attended to in other parts of the kingdom, except at Edinburgh, by the laudable efforts of the late Dr. Hope.

The institution of the Linnean Society; the avidity with which the study of Botany has been lately pursued by many in every rank and description of persons; the necessity I was under to find terms by which to express myself in my Letters on Botany, and especially in the great work which I am now about to publish; have all conspired to excite my attention a third time to

* In the year 1762.

Botanical

Botanical Language, and particularly to the mode which ſeems beſt for us to adopt when we write or ſpeak of the ſcience in our native tongue.

So long as Botany continued to be ſtudied only among thoſe who had received a learned education; the original terms of Linneus, derived from the Greek or Latin, ſerved all the purpoſes of general intercourſe. But when it became univerſally adopted, a Vernacular Language would of courſe be gradually formed; and if it were to be left to chance, or the choice of the ignorant, many abſurdities and barbariſms would be introduced, debaſing our ſterling Engliſh. This it has been my wiſh to avoid; and I now renew the attempt which I made ſome time ſince* to fix our native Botanical Language on certain and reaſonable principles, conformable to general analogy. Had not this been my particular view, and had I been ſatisfied with what has been already done by ſeveral learned and ingenious writers, I ſhould certainly not have obtruded my ideas upon the public, after ſuch a multitude of elementary books had been printed: and even now the errors, omiſſions, and defects of various

* Diſſertation printed in vol. I. of the Tranſactions of the Linnean Society.

kinds.

kinds, which those who are skilled in Philological Botany will easily detect in this little volume, require an apology. I must request the public therefore to consider it as a mere attempt, that may hereafter be improved into something more worthy of their regard, if learned Botanists and Philologists will condescend to communicate their opinions on the subject: and I promise them that every observation which is made with candour, shall be received by me with gratitude, and considered with attention.

But I am aware that many will say, You give too much importance to these laborious trifles. But if they be such, they lead not to any serious mischief; and so long as the weightier matters of science are not neglected, there can be no harm in working up and polishing the minuter parts, so that the ornaments may not disgrace the edifice.

The indolent, I am sensible, will shrink from this odious assemblage of terms: but the indolent must be contented to lie under the disgrace of ignorance, or at most to skim very lightly the surface of knowledge.

Many terms are indispensably necessary in the Science of Nature, where the objects that present them-

themſelves to our conſideration are ſo numerous. The queſtion therefore is not, whether we ſhall have terms or no, but in what manner they ſhould be conſtructed ſo as to anſwer the great purpoſe of receiving and communicating knowledge moſt effectually? Now we have been long in poſſeſſion of a preciſe and ſignificant language invented by Linneus, generally adopted by the learned of every country in Europe, and received in great part into the vernacular tongues of ſeveral. Can we do better therefore than to keep as cloſe as poſſible to this, and to adopt the Linnean terms themſelves, ſo far as the nature and ſtructure of the Engliſh language will permit, and whenever we can do it without violating the laws of grammar or common ſenſe? We ſhall thus have all the advantage which is derived from ſpeaking and writing one univerſal language: whereas if we ſet about finding equivalent terms in Engliſh, theſe will require as much explanation as the others, and will be equally difficult to the ſtudent, without having poſſeſſion or preſcription to plead. Thus ſhall we become unintelligible to every other nation, without being more intelligible among ourſelves.

Laying it down therefore as a firſt principle, that we ought to adhere as cloſely as poſſible to the Linnean language, it will be found that the

number of terms, purely Engliſh, occurring in the Botanical Gloſſary, which is now offered to the public, is comparatively ſmall. That this may be clearly ſeen, and that perſons may judge for themſelves how far they would chooſe to depart from the original terms, I have put together at the bottom of the page thoſe which are tranſlated or equivalent*. A perfect agreement on this ſubject

* Arched or Vaulted. *Fornicatus.*
Awn. *Ariſta.*
Banner or Standard. *Vexillum*
Barb. *Glochis.*
Bark, outer. *Cortex.*
——, inner. *Liber.*
Barren. *Sterilis.*
Beaked. *Roſtratus.*
Beard. *Barba.*
Bellying. *Ventricoſus.*
Berry. *Bacca.*
Boat-ſhaped. *Navicularis.*
Bough or Branch. *Ramus.*
Bowed. *Arcuatus.*
Briſtle. *Seta.*
Bud. *Gemma.*
Cell. *Loculamentum.*
Chaff. *Palea.*
Chinked. *Rimoſus.*
Claſper or Tendril. *Cirrus.*
Claſping or Stem-claſping. *Amplexicaulis.*
Claw. *Unguis.*
Cleft. *Fiſſus.*
Club-ſhaped. *Clavatus.*
Cluſtered or crowded. *Confertus.*
Cobwebbed. *Arachnoideus.*
Coiled. *Tortilis, Tortus.*
Columnar. *Teres.*
Condenſed. *Coarctatus.*
Converging. *Connivens.*
Cotton, nap or flocks. *Tomentum.*
Creeping. *Repens.*
Creſcent-ſhaped. *Lunatus.*
Croſs-wiſe. *Cruciatim.*
Curled. *Criſpus.*
Dotted. *Punctatus.*
Double. *Geminus.*
Doubled. *Duplicatus.*
Down. *Pappus.*
Drooping. *Cernuus.*
Eared. *Auritus.*
Evergreen. *Sempervirens.*
Eye. *Hilum.*
Flat. *Planus.*
Flatted. *Compreſſus.*
Fleſhy. *Carnoſus.*
Floating. *Natans.*
Flower. *Flos.*
Fringed. *Fimbriatus.*
Funnel-ſhaped. *Infundibuliformis.*

Furrowed

ſubject is not to be expected, nor is it of any great conſequence; but I have ſubjoined a liſt of doubtful terms, many of which may perhaps be uſed

Furrowed or grooved. *Sulcatus.*
Gape. *Rictus.*
Gaping. *Hians.*
Gaſhed. *Inciſus.*
Hair. *Pilus.*
Halved. *Dimidiatus.*
Hanging down. *Dependens.*
Head. *Capitulum.*
Headed. *Capitatus.*
Heaped. *Congeſtus.*
Heart. *Corculum.*
Helmet. *Galea.*
Hoary. *Canus, Incanus.*
Hollow. *Cavus.*
Hook. *Hamus.*
Horn. *Cornu.*
Jag. *Lacinia.*
Jaws or throat. *Faux.*
Jointed. *Articulatus.*
Keel. *Carina.*
Knotted. *Nodoſus.*
Latticed. *Cancellatus.*
Leaf. *Folium.*
Lip. *Labium.*
Male. *Mas ſ. maſculus.*
Manifold. *Multiplex.*
Marrow or Pith. *Medulla.*
Mouth. *Os.*
Naked. *Nudus.*
Neck. *Collum.*
Neſtling. *Nidulans.*
Nodding. *Nutans.*
Pair. *Jugum.*
Partition. *Diſſepimentum.*
Permanent. *Perſiſtens.*
Pitcher-ſhaped. *Urceolatus.*
Pitted. *Lacunoſus.*
Plaited. *Plicatus.*
Prickle. *Aculeus.*
Protruded. *Exſertus.*
Punched. *Pertuſus.*
Rib. *Coſta.*
Root. *Radix.*
Rough. *Aſper.*
Runner. *Reptans flagellum.*
Salver-ſhaped. *Hypocrateriformis.*
Sap. *Succus, Alburnum.*
Scaly. *Squamoſus.*
Scattered. *Sparſus.*
Scored. *Exaratus.*
Seed. *Semen.*
Sheath. *Vagina.*
Shrivelling. *Marceſcens.*
Shrub. *Frutex.*
Sickle-ſhaped. *Falcatus.*
Silky. *Sericeus.*
Smooth. *Glaber.*
Spur. *Calcar.*
Stalk or Stem. *Caulis.*
Stiff. *Rigidus.*
Stings. *Stimuli.*
Straight. *Rectus.*
Sucker. *Stolo.*
Tail. *Cauda.*
Tapered. *Attenuatus.*
Toothed. *Dentatus.*
Tree. *Arbor.*
Twin. *Didymus.*
Twining. *Volubilis.*

ufed indifferently at difcretion *. The learned will of courfe manifeft a predilection for the Greek or Latin terms, and the Englifh Botanift for the other. Some of our terms approach fo near to their original, that they can fcarcely be confidered as Englifh †.

That

Twifted. *Tortus*, *Tortilis*, *Tortuofus*.
Veil. *Calyptra*.
Veffels. *Vafa*.
Underfhrub. *Suffrutex*.
Wing. *Ala*.
Woody. *Lignofus*.
Wool. *Lana*.
Wrinkled. *Rugofus*.
Writhed. *Contortuplicatus*.

* Awl-fhaped or Subulate.
Bell-fhaped or Campanulate.
Bitten or Præmorfe.
Bladder or Veficle.
Bliftered or Bullate.
Blunt or Obtufe.
Border, brim, or limb. *Limbus*.
Bright or Lucid.
Bundle or Fafcicle.
Clammy or Vifcid.
Climbing or Scandent.
Coated or Tunicated.
Coriaceous or Leathery.
Cottony, nappy, or Tomentofe.
Cowled or Cucullate.
Crenate or Notched.
Dagger-pointed, or Mucronate.
Erect or Upright.
Feathered or Plumofe.
Gnawed or Erofe.
Heart-fhaped or Cordate.
Hoofed or Ungulate.
Kidney-fhaped or Reniform.
Kneed or Geniculate.
Mule or Hybrid.
Ragged or Squarrofe.
Rugged or Scabrous.
Sabre-fhaped or Acinaciform.
Shaggy or Hirfute.
Sharp or Acute.
Thorn or Spine.
Tongue-fhaped or Linguiform.
Top-fhaped or Turbinate.
Trailing or Procumbent.
Warted or Verrucofe.
Waved or Undulated.
Wedge-fhaped or Cuneiform.
Wheel-fhaped or Rotate.
Whorl or Verticil.

† Such as,

Crefted from Criftatus.
Crown from Corona.
Entire from Integer.
Fork from Furca.

Fruit

That we must depart sometimes from the Linnean language I readily allow: but the cases are rare, and the instances under each case are not many.—Thus, when we have a significant English term, which has been in long and general use, it certainly ought to keep its place: but the original terms of the science in our language, which have received the sanction of the public, are very few*.—In the case also of very long words, giving too great an air of pedantry to the language, it may perhaps be better to substitute English compounds, which may be used with considerable success†.—When any Latin terms have already an appropriate sense in English, it avoids confusion to translate them, rather than to use the originals themselves‡. So, likewise, when they do not assi-

Fruit from Fructus.
Nut from Nux.
Ray from Radius.
Round from Rotundus.
Unarmed from Inermis.

* Seed. Leaf. Stalk. Flower. Fruit. Cell for *Loculamentum*. Partition for *Dissepimentum*. Seed-vessel for *Pericarpium*.—See the lists in the former notes. Grew's terms; as Empalement, Chive, Semet, Poimell, Ovary, Knob or Button, &c. have never met with a general reception.

† As Bell-shaped for *Campaniformis*. Funnel-shaped for *Infundibuliformis*. Salver-shaped for *Hypocrateriformis*.

‡ As in *Adversus*, *Exasperatus*, *Strictus*.

milate kindly to our language, the ſame rule is to be obſerved *.

Theſe exceptions being admitted, I hope to be excuſed for repeating my opinion — that the advantage of Botany will moſt effectually be conſulted, by retaining the Linnean terms, whenever there is no cogent reaſon to the contrary. And I muſt add, that in order to avoid confuſion, the greateſt caution is neceſſary, when we would ſubſtitute equivalent terms for the originals †.

Many particular obſervations, confirming the theory here laid down, will be found ſcattered here and there in the Gloſſary. It remains therefore only to expreſs my wiſh, that the ſtructure and genius of our native language may be attended to, not only in the formation of the terms themſelves, but in their terminations and plurals, their compounds and derivatives. Not to detain the reader however any longer, I beg leave to refer him, for this part of the ſubject, to my Eſſay in

* As in *Teres*, *Amplexicaulis*, *Hirtus*.

† As in rendering *deciduus* and *caducus* by *falling*. *Plumoſus* by *featbery*; and *Pinnatus* by *featbered*. *Dichotomus* by *forked*, &c.

the

the Linnean Tranſactions, and to the method which I have purſued in the conduct of this work*.

The ſcientifical mode of arrangement, which Linneus has adopted, and from him moſt of his followers, has the advantages of elegance, and of preſenting kindred terms to the Reader at one view. I have however preferred the alphabetical form for convenience, and becauſe a word that is not underſtood is thus moſt readily detected. A book of this ſort, in order to be perfect, ſhould contain a complete ſcientific arrangement, accompanied by a copious explanatory index or

* That my meaning however may be clearly underſtood, I here put down a few inſtances to illuſtrate it. With reſpect to Plurals, *Nectarium* ſhould make *Nectariums*, not *Nectaria*. *Nectary* ſhould make *Nectaries*. Pericarpium, *Pericarpiums*. Corolla, *Corollas*. Anthera, *Antheras*. Stamen, *Stamens*; not *Stamina*; which is ſometimes taken for a ſingular, as *Stipula* is for a plural. — With reſpect to Derivatives and Compounds, they ought to follow the analogy of their Roots. Thus if we adopt the Engliſh terms Prickle and Thorn, we muſt ſay *Prickly* and *Thorny*, not Aculeate and Spinoſe. If for *Loculamentum* we put Cell, we muſt uſe *Two-celled*, not bilocular. If for *Bacca* we put Berry, we muſt write *Berry-bearing*, not bacciferous. *Two-leaved*, *Many-leaved* will follow leaf. *Two-flowered*, *Many-flowered* will follow Flower. Root will have *Root-leaf*, not radical leaf.

b 4 gloſſary;

glossary; something in the manner of Mr. Lee's second and following editions of his Introduction. But the scientifical arrangements are already numerous: the task of giving one more to the public would have interrupted too much the more important pursuits in which I am at present engaged; and my work would have risen into a bulk too great for the use to which I had destined it.

This Glossary, such as it is, will be found to contain the terms of Linneus's *Philosophia Botanica*, *Termini Botanici*, and *Delineatio Plantæ*; with the addition of some which are used in the *Species Plantarum* and *Systema Vegetabilium*, but are not explained or even registered in his fundamental or elementary treatises. They are always accompanied by an explanation in English, and frequently by one in Latin also; in order that the unlearned may understand, and the learned judge for themselves concerning their meaning, where there appears to be any shadow of a difficulty. The derivation of the term is commonly added, where it seems necessary, or could be given with any degree of satisfaction: sometimes a variety of derivations is set down, with a view of shewing the uncertainty that we find in this branch of our philological enquiries. Lastly, instances are

sub-

ſubjoined, where they were at hand, of the moſt known plants, beſt adapted to illuſtrate the terms and their explanations. When the Engliſh word differs from the Latin in any thing more than the termination, both will be found in their proper places, mutually referring to each other; and each frequently accompanied with an explanation in its proper language. I have ſometimes hazarded opinions and criticiſms, not with any view of dogmatizing, but with the hope of being corrected, or better informed.

That the Reader may know where to apply for information, in caſe he ſhould not be ſatiſfied with what is here ſet before him, I ſhall conclude this Preface with a Liſt of the principal fundamental Treatiſes on Botanical Language that have been hitherto publiſhed, and have been ſeen or conſulted by me.

Linneus's celebrated elementary work, firſt publiſhed at Stockholm in 1751, is the foundation of all the reſt. It is entitled, *Philoſophia Botanica, in qua explicantur Fundamenta Botanica, cum definitionibus partium, exemplis terminorum, obſervationibus variorum, adjectis figuris æneis.* It contains the Inſtitutes of the Science of Botany, and has eleven plates, ten of which are explanatory

of

of leaves, ftalks, fulcres, roots, fructification, &c. There are feveral editions of this valuable book. It was publifhed in the fame year at Amfterdam; at Vienna in 1755, 1763 and 1770; at Berlin in 1779, by Gleditfch; and at the fame place in 1790, by Willdenow*.

A lift of Botanical Terms without explanations, under the title of *Delineatio Plantæ*, was prefixed to the twelfth and thirteenth editions of *Syftema Vegetabilium*, 1767 and 1774; and has been continued in the fourteenth edition of the fame work by Murray, 1784; and in the thirteenth edition of *Syftema Naturæ*, by Gmelin, in 1791.

This lift is preceded by a general explanation of the principal parts of plants, and fome circumftances relative to their phyfiology, under the title of *Regnum Vegetabile*.

But the firft appearance of a complete lift of Botanical Terms, accompanied with explanations, and detached from other matter, was in the fixth volume of *Amœnitates Academicæ*, printed in 1764. It is entitled *Termini Botanici*, and is a thefis read by J. Elmgren, in 1762.—This was reprinted

* See Dr. Pulteney's General View of the Writings of Linneus, p. 46—50.

here,

here, with additions, in 1779, by Dr. Rotheram, under the title of *Caroli a Linnè Termini Botanici, definitionibus pluribus aucti; atque Systematis Sexualis Explicatio. Opere Joh. Rotheram jun.* M. D. Novicastri, 1779, 12mo.

Dr. Giseke also, of Hamburgh, has printed the same work, with the addition of other matters, under the title of *Termini Botanici Classium Methodi Sexualis Generumque Plantarum Characteres Compendiosi. Recudi cum interpretatione Germanica definitionum Terminorum, curavit Paulus Dietericus Giseke*, M. D. &c.—*Editioni huic alteri accesserunt Fragmenta Ordinum Naturalium Linnæi, Nomina Germanica Planeri Generum, Gallica & Anglica Terminorum, & Indices.* Hamburgi, 1787, 8vo.

This volume contains Linneus's Preface to his *Genera Plantarum*—*Clavis Systematis Sexualis* both in Latin and German, with an explanation of the Classes--*Regnum Vegetabile*--*Delineatio Plantæ*, with explanations from *Termini Botanici*, and additions. The whole of this is both in Latin and German.—An alphabetical Index of Terms in Latin, French, and English: the last very imperfect, and full of mistakes — A German Index.—Part the second contains compendious Characters of Linneus's Genera, such as are placed at the head of each

each Clafs in *Syftema Vegetabilium*, from Murray's edition; with the German names, and a Latin and German Index. — And, *Ordines Naturales*, from the fixth edition of Linneus's *Genera Plantarum*; with the new Genera added in their proper places. — I have not feen the firft edition of this work — When I quote *Delin. Pl.* in the following Gloffary, it is from this book of Gifeke's.

Mr. Hudfon has alfo prefixed *Termini Botanici* to the fecond edition of his *Flora Anglica*, in 1778.—And the Lichfield Society have given it, together with the *Regnum Vegetabile* and *Delineatio Plantæ*, in Englifh, at the head of their tranflation of Linneus's *Vegetable Syftem*, publifhed in 1783; accompanied with many excellent general philological remarks in the Preface.

The Elements of Botany appeared firft in an Englifh drefs in the Introductions of the late celebrated Mr. Philip Miller, and of Mr. James Lee, nurferyman, at the Vineyard, Hammerfmith, in the year 1760. The former, annexed to the late editions of his Gardener's Kalendar, was fhort and imperfect. But the latter contains a full explanation of Linneus's terms. It is entitled— *An Introduction to Botany. Containing an Explanation of the Theory of that Science; extracted from*

the Works of Dr. Linneus; with twelve copper-plates, two explanatory tables, &c. To the second edition of 1765 was added a Gloſſary. The fourth and laſt edition was publiſhed in 1788, 8vo.

This work however not being a tranſlation of Linneus's fundamental treatiſe, Mr. Roſe undertook this taſk, which had long been much deſired by Engliſh Botaniſts unacquainted with the learned languages. He publiſhed it under the title of *The Elements of Botany: containing the Hiſtory of the Science, with accurate Definitions of all the Terms of Art, exemplified in eleven copper-plates; the Theory of Vegetables; the Scientific Arrangement of Plants, and Names uſed in Botany; Rules concerning the general Hiſtory, Virtues and Uſes of Plants. Being a tranſlation of the* Philoſophia Botanica, *and other treatiſes of the celebrated Linneus. To which is added, an Appendix, wherein are deſcribed ſome Plants lately found in Norfolk and Suffolk, illuſtrated with three additional copper-plates, all taken from the life.* By *Hugh Roſe, Apothecary, London*, 1785, 8vo.

A few years after Mr. Lee's Introduction was publiſhed, Dr. Berkenhout gave the Linnean Terms, with an explanation, in the form of a Dic-

Dictionary, entitled *Clavis Anglica Linguæ Botanicæ; or a Botanical Lexicon; in which the Terms of Botany, particularly those occurring in the works of Linnæus, and other modern writers, are applied, derived, explained, contrasted and exemplified.* By *John Berkenhout,* M. D. *Lond.* 1764.

This work probably occasioned the addition of an alphabetical Glossary to Mr. Lee's Introduction, the year following. The public were so well satisfied with Dr. Berkenhout's performance, that a second edition of it was printed in 1789.

Dr. Colin Milne also is the Author of an elementary book in the same form, but on a plan much more extensive, as may be seen from the Title, which runs as follows—*A Botanical Dictionary: or Elements of Systematic and Philosophical Botany. Containing Descriptions of the Parts of Plants—an Explanation of the Scientific Terms used by* Morison, Ray, Tournefort, Linnæus, *and other eminent Botanists—A brief Analysis of the principal Systems in Botany—A critical Enquiry into the merits and defects of the Linnean Method of Arrangement, and Distribution of the Genera.—Descriptions of the various Tribes, or natural Families of Plants, their Habit and Structure, Virtues, sensible Qualities, and œconomical Uses—An impartial Exami-*

Examination of the Doctrine of the Sex of Plants—with a Discussion of several curious Questions in the Vegetable Oeconomy, connected with Gardening. The whole forming a Complete System of Botanical Knowledge. By *Colin Milne*, L. L. D.—The first edition in 1770; the second in 1778; Lond. 8vo.

In the *Universal Botanist*, &c. published by Richard Weston, Esq. in 1770, there is a copious Botanical Glossary. As there is also in the second edition of Dr. Withering's *Botanical Arrangements*, printed in 1792. Mr. Stephen Robson has prefixed the *Principles of Botany* to his *British Flora*, York, 1777. 8vo.

Lastly, there is *A Short and Easy Introduction to Scientific and Philosophic Botany.* By Samuel Saunders, Lond. 1792, small octavo.—Neatly printed, in a little compass; well adapted to such as do not wish to enter into the depths of the Science.

It would carry me too far, were I to attempt enumerating the Elementary books which have been published in Foreign Countries, and in various Languages. I shall content myself therefore with barely mentioning those which follow:

Ge.

Geo. Chr. Oeder Elementa Botanicæ—pars 1. 1764. —*pars* 2. 1766. *Hafn.* 8vo.

Joan. Antonii Scopoli Fundamenta Botanica Vienna, 1786, 8vo.

Joan. Danielis Leers Nomenclator Linneanus, seu Explicatio Terminorum Technicorum Ordine Alphabetico exhibita. — cum Flora Herbornensi. Berol. 1789, 8vo.

There remains only to request the indulgence of the Public, for adding one more to the number of Elementary Books already before them.

THE LANGUAGE OF BOTANY.

ABBREVIATED Perianth (*Abbreviātum Perianthium*). Shorter than the tube of the corolla: as in *Pulmonaria maritima*.

ABORTIVE Flower (*Abortiens flos*). Producing no fruit.

ABRUPT Leaf. A term uſed only in pinnate leaves, which are ſaid to be abruptly pinnate (*abrupte pinnata*), when they have neither leaflet (*foliolum*) nor tendril or claſper (*cirrus*) at the end.

ACAULIS. Stemleſs; without ſtem or ſtalk.

ACEROSE Leaf (*Acerōsum Folium*). Linear and permanent; as in *Pine*, *Fir*, *Juniper*, *Yew*. *Lin. philos. bot.* 42.—In form of a needle, ufually inferted at the bafe into the branch by articulation, as in the cone-bearing trees, p. 219.

ACICULAR (*Aciculāris*). Shaped like a fmall needle. The trivial name of a fmall fharp-pointed *Scirpus*.

ACINACIFORM Leaf (*Folium acinaciforme*). Flefhy, compreffed; one edge convex and fharp, the other ftraighter and thicker; refembling a fabre, faulchion or fcymitar. As in *Mefembryanthemum acinaciforme*.

ACINI. The diftinct component parts of the fruit in Mulberry, Blackberry and Rafpberry. Thefe fruits, with many others, are commonly called Berries; but not anfwering to Linneus's definition, may have the name of *Compound* or *Spurious Berries*.

ACOTYLEDONOUS plants (*Plantæ Acotyledōnes*). Without cotyledons or lobes to the feed; and confequently not having any feminal leaves: as in the clafs *Cryptogamia*.

The diftinction of vegetables into *Acotyledones*, *Monocotyledones*, *Dicotyledones* and *Polycotyledones*;

or into ſuch as have no lobes, one lobe, two lobes, or ſeveral, in a ſeed, has been long made, and is the baſis of Juſſieu's natural arrangement.

ACULEATUS. Prickly.

ACULEUS (a Prickle). *Mucro pungens, cortici tantum affixus. Lin.* See *Prickle.*

ACUMINATE or ſharp-pointed (*Acuminātus*). Ending in a ſubulate or awl-ſhaped point. Frequent in leaves: in the calyx, as in *Itea*, &c.

ACUTE, ſharp. *Acūtus.* Ending in an acute angle. Applied to leaves: and to the perianth, as in *Primula*, &c.

ADNATUS, Adnate, Adjoined, Adhering, faſtened, fixed or growing to. As the offsets, or ſmall bulbs, produced from the main bulb, and cloſely adjoining to it; in *Narciſſus*, &c.—The leaf, adhering to the ſtem or branch by the ſurface or diſk itſelf.—The petiole.—The ſtipule, fixed to the petiole, and oppoſed to *ſolutus*, looſe, detached; as in *Roſe*, *Bramble*, *Potentilla*, &c.—The Anther.—The ſtyle, adhering to the corolla, as in *Canna*.

Adpreſſus. See *Appreſſed*.

Adſcendens. See *Aſcending*.

Adversum folium (an Adverſe leaf). The upper ſide turned to the ſouth.

Aequalis Polygamia (Equal Polygamy). The name of the firſt order in the claſs *Syngeneſia* of Linneus's ſyſtem, containing thoſe compound flowers, which have all the florets hermaphrodite and alike.

Aequinoctiales Vigiliæ. See *Vigiliæ*.

Æstivatio (Æſtivation). The diſpoſition of the petals within the floral gem or bud. This is 1. *Convolute*, when the petals are rolled up like a ſcroll of paper. 2. *Imbricate*, when they lie over each other like tiles on a roof. 3. *Conduplicate*, when they are doubled together at the midrib. 4. *Valvate* or *valved* (valvata), when as they are about to expand they are placed like the glumes in graſſes. 5. *Unequally-valved*, when they differ in ſize.

Aggregate flower (*Aggregātus flos*, from *aggregare*, to aſſemble or collect together). That

which has ſome part of the fructification common to ſeveral florets. Or, when ſeveral florets are ſo combined by the intervention of ſome part of the fructification, that taking away one of them deſtroys the uniformity of the whole. This common bond is either the Receptacle or the Calyx. The partial or component flower of the aggregate is called a *floſcule* or *floret*.

There are ſeven kinds of aggregate flowers. 1. Umbellate or Umbelled. 2. Cymoſe or Cymed. 3. Compound. 4. Aggregate, properly ſo called, having a dilated receptacle, and the florets on peduncles: as *Scabious*, *Knautia*, *Teaſel*, *Cephalanthus*, *Globularia*, *Leucadendron*, *Protea*, *Statice*, &c. 5. Amentaceous. 6. Glumoſe, as the graſſes. 7. Spadiceous, as the Palms, alſo *Calla*, *Dracontium*, *Pothos*, *Arum*, *Zoſtera*.

Hence *Aggregatæ* is the name of the forty-eighth order of plants, in Linneus's fragments of a natural arrangement, in *Philoſ. bot.* containing ſuch vegetables as have their flowers properly aggregate. See *Lin. gen. ed.* 6. at the end.

Ala. See *Wing*. The angle formed by a branch with the ſtem, or by a leaf with the branch, was formerly expreſſed by this term; but it is now called the *Axilla* or *Axil*; which ſee.

Alātus. See *Winged.*

ALBURNUM. The ſoft white ſubſtance in trees, between the *liber* or inner bark, and the wood, gradually acquiring ſolidity, and becoming genuine wood.—*Intermedia ſubſtantia libri & ligni.* Lin.—Workmen call it the *Sap.*

ALGÆ (Flags). The ſecond of the ſeven Families, and the eighth of the nine Tribes or Nations into which Linneus divides all vegetables. Comprehending ſuch as have the root, leaves and ſtem all in one: as the *Lichens* or *Liverworts, Fuci* or *Sea-weeds,* &c. See *Families* and *Nations.*

In Linneus's artificial ſyſtem, the *Algæ* occupy the third order of the claſs *Cryptogamia.* In his fragments of a natural arrangement, at the end of *Genera Plantarum,* they make the fifty-ſeventh ſection, and in *Philoſophia Botanica* the ſixty-fixth.

ALTERNATE (*Alternus*), branches, leaves, peduncles or flowers: coming out one after or above another, in a regular ſucceſſion or gradation. Contraſted with oppoſite.

Alternately-pinnate leaf. When the leaflets or component leaves are arranged alternately on each ſide of the common petiole.

Alveolate (*Alveolātum* ſ. *favoſum*) Receptacle. Divided into open cells, like an honeycomb, with a ſeed lodged in each: as in *Onopordum*.

Ament (*Amentum*). Called by others *Julus*, *Nucamentum*, *Catulus*. In Engliſh, *Catkin*, from the French *Châton*, on account of its reſemblance to a cat's tail.—*Amentum; gemmaceum, imbricatum, commune**: ſ. *Infloreſcentia, ex receptaculo communi paleaceo gemmaceo*†. A ſpecies of calyx, or rather of infloreſcence, from a common, chaffy, gemmaceous receptacle: or, conſiſting of many chaffy ſcales, ranged along a ſtalk ſlender as a thread, which is the common receptacle.—In the claſs *Monoecia*, the male flowers are frequently thus diſpoſed; as in *hazle*, *birch*, *oak*, *walnut*, *ſedge*, &c. alſo in *willow*, *poplar*, &c. in claſs *Dioecia*.

Amentaceæ. The name of the ſixteenth order in Linneus's fragments of a natural method, in *Philoſophia Botanica*; and of the fiftieth at the end of *Genera Plantarum*: alſo, of a claſs in Tournefort's, Boerhaave's and Royen's ſyſtems.

Amentaceous flowers; one ſpecies of the Aggregate; borne or growing in an ament or catkin.

* Lin. Regn. veg.

† Lin. Philoſ. botan.

AMPLEXICAULE *folium*; a Stem-clafping leaf, embracing, clafping or furrounding the ftem by its bafe. Some leaves go only half round; thefe are called *Semiamplexicaulia*.

ANCEPS caulis (an ancipital ftem). *Angulis duobus oppofitis acutiufculus*. Two-edged or double-edged. Flatted, and rather fharp with two oppofite angles. This is the common form of the ancipital ftem, but it may have more angles than two; for Linneus gives not only *digonus* (caulis) but *trigonus*, *tetragonus*, *pentagonus*, and *polygonus*, as fpecies of the *anceps*.

There is alfo an ancipital leaf, having two prominent longitudinal angles, with a convex difk; as in *Sifyrinchium*.

ANDROGYNOUS plant. (*Planta androgyna*, from ανηρ and γυνη): bearing male and female flowers, on the fame root, without any mixture of hermaphrodites. Such plants are to be found chiefly in the clafs *Monoecia*.

Androgynous flowers, having ftamens or piftils only.

ANGIOSPERMIA. The name of the fecond order in the clafs *Didynamia* of the Linnean fyftem. It is fo called, becaufe the feeds (σπερματα) are inclofed in a veffel (αγγος) or capfule: in oppofi-

tion

tion to the firſt order, *Gymnoſpermia*, which has naked ſeeds.

ANGULAR ſtem (*angulātus caulis*). Excavated or grooved longitudinally with more than two hollow angles. Called *triangular*, &c. (trigonus, &c.), according to the number of theſe angles:——*obtuſe-angled* or *acute-angled*, from the meaſure of them.

Leaves alſo, running out into angles, are named *triangular*, &c. from the number of angles.

ANNUAL plant or root; periſhing within the compaſs of a year: oppoſed to *biennial* or *perennial*. The ſtem of herbaceous plants, although the root be permanent, is annual, and thus is diſtinguiſhed from that of trees and ſhrubs.

ANOMALOUS, Irregular. Applied to plant, calyx, corolla, gem or bud, &c. In moſt of the old ſyſtems we find an anomalous or miſcellaneous claſs.

ANTHER (Ανθηρα, *Anthēra*), *Apex* of Ray; *Capſula ſtaminis* of Malpighi. Summit, Semet, Pendent, or Tip, of Grew and other Engliſh writers.—*Pars floris gravida polline, quod matura dimittit*: or, *fœta granulato polline, et hoc fovilla*. A part of the flower, big with pollen or farina, which

which it emits or explodes when ripe: or, big with granulated pollen, and that with fovilla. Or it may be defined to be a veſſel deſtined to produce and emit a ſubſtance for the impregnation of the germ. It forms a part of the ſtamen, and is placed on the top of the filament.

I prefer Anther to Anthera, in Engliſh, becauſe we thus avoid any diſſenſion between the learned and unlearned reſpecting the pronunciation of the penultima, and the formation of the plural.

There is generally one anther to each filament: in *Cucurbita* however there is one to three; and in the claſs *Syngeneſia*, one to five filaments. In *Mercurialis* we find two, in *Fumaria* three anthers to a filament; in *Bryonia*, five to three filaments; in *Theobroma* five to each.—In ſome flowers anthers are regularly wanting on one or more of the filaments: as in *Chelone* and *Martynia*, one—in *Pinguicula* and *Verbena*, two—in *Gratiola*, *Bignonia*, and ſome *Geraniums*, three—in *Curcuma*, four—in *Pentapetes* and other *Geraniums*, five. These are called barren filaments.

Anthers are *connected*

By the baſe, in moſt flowers.

By the top, in *Colchicum*.

By

By the ſide, in *Canna*, *Amomum*.
By the nectary, in *Coſtus*.

Their *ſituation* is

On the top of the filaments, in moſt flowers.
On the ſide, in *Paris* and *Aſarum*.
On the piſtil, in *Ariſtolochia*.
On the receptacle, in *Arum*, *Annona*.

They burſt

On the ſide, in *Leucoium*, and moſt flowers.
At the top, in *Galanthus* and *Kiggelaria*.
From the baſe upwards, in *Epimedium* and *Leontice*.

They are

Diſtinct, ſeparate, not cohering. *Globularia*.
Connate, coaleſcent, united. *Solanum*, *Syngeneſia*.
Twin (*didymæ*), ſwelling outwards with two knots. *Boerhaavia*, *Salicornia*, *Blitum*, *Ammannia*, *Potamogeton*.

Upright, pointing upwards. *Salicornia*, *Liguſtrum*, *Olea*, *Chionanthus*, *Verbaſcum*, *Tulipa*.
Incumbent, horizontal, and then verſatile, being fixed only in the middle ſo as to move freely. *Gladiolus*, *Globularia*, *Dipſacus*, *Scabioſa*, *Paſſiflora*.

Exſert or ſtanding out or beyond the corolla, in ſome ſpecies of *Erica*.
Included, or incloſed within it. *Jaſminum*, *Syringa*, *Primula*.

Awned,

Awned, ending in an awn, in ſome ſpecies of *Erica.*

Horned (*bicornes*), cloven at the tip, and the clefts ſpreading like horns, in ſome ſpecies of *Erica, Andromeda, Pyrola.*

Creſted, terminating in a creſt, in ſome ſpecies of *Erica.*

Their figure is

Oblong, in *Lilium, Graſſes.*

Globular, in *Mercurialis.*

Sagittate, or ſhaped like the head of an arrow, in *Crocus, Nolana, Soldanella, Dodecatheon, Nerium, Linum, Bromelia.*

Angular, in *Tulip.*

Horned, in *Hamamelis, Erica, Vaccinium, Pyrola.*

Forked (*bifurcatæ*), in moſt *Graſſes.*

Linear, in *Heliocarpus, Stapelia, Canna, Protea, Coffea, Liriodendrum, Magnolia.*

Subulate, or awl-ſhaped, in *Roella, Cornus.*

Lanceolate, or ſhaped like the head of a ſpear, in *Bankſia.*

Haſtate, or ſhaped like the head of a halbert, in *Jacquinia.*

Cordate, or heart-ſhaped, in *Capraria, Tinus, Bucida, Malpighia, Thea.*

Reniform, or kidney-ſhaped, in *Ginora, Tradeſcantia,* and the claſs *Monadelphia.*

Ovate, or egg-ſhaped, in *Limeum*, *Gladiolus*, *Commelina*, *Convolvulus*.

Three-cornered (*trigona*), in *Roſa*.

Four-cornered (*tetragona*), in *Cannabis*, *Populus*, *Dictamnus*, *Ceſtrum*, *Arum*, *Cannabis*.

Lunular, or ſhaped like a creſcent, in *Fragaria*, *Comarum*.

Spiral, or twiſted like a ſcrew. *Chironia*.

They have only

One cell, in *Mercurialis*.

Two cells, in *Epimedium*, *Aſclepias*, *Daphne*, *Helleborus*.

Three cells, in *Orchis*.

Four cells, in *Fritillaria*, *Tropæolum*, *Pæonia*, *Salix*.

Apetalous flower (*Apetălus flos*): without any corolla. Called by other writers Stamineous, Incomplete, Imperfect. Of ſuch, a claſs is formed in ſeveral ſyſtems.

Apex; the tip or end. When applied to leaves, it is the upper extremity, fartheſt from the baſe or inſertion.—Ray calls the Anther by this name.

Aphyllous (*Aphyllus*): leafleſs, deſtitute of leaves: applied to the ſtem, and oppoſed to *foliatus*, leafy.

Apo-

APOPHYSIS. A procefs or excrefcence from the receptacle of moffes.

APPENDICULATE, Appendicled, or Appendaged, (*appendiculātus*). *Ramentis foliaceis ad bafin.* This term is applied to a petiole, when it has a fmall leaf or leaves at the bafe.

APPRESSED (*appreffus* or *adpreffus*), preffed or fqueezed clofe. Applied to a leaf, when the difk approaches fo near to the ftem, as to feem as if it had been preffed to it by violence:—alfo to a calyx, when it is clofe to the peduncle—and to a peduncle, when it is clofe to the branch or ftem.

APPROXIMATING leaves. Growing very near each other. Oppofed to *remote*.

AQUATIC plants. Growing in or near water.

ARACHNOIDEUS, Cobwebbed. Covered with a thick interwoven pubefcence, refembling a cobweb. Leaf, peduncle, calyx.

ARBOREOUS (*Arboreus*) ftem. Single, woody and permanent; as the trunk or bole of a tree. Oppofed to fhrubby, underfhrubby and herbaceous.

ARBORESCENT (*Arborefcens*) ftem. From herbaceous becoming woody.

ARBUSTIVA (from *Arbuſtum*, a ſhrub). The name of the thirty-ninth order, in Linneus's fragments of a natural arrangement, in *Philoſophia Botanica*. The ſame with *Heſperideæ*, in his *Genera Plantarum*, n. 19.

ARCHED (*Fornicātus*). As the upper petal of the *Aconite*, and the upper lip of ſome ringent flowers. See *Vaulted*. It ſhould ſeem that either term might be adopted indifferently.

ARCUATUS, Bowed. Bent like a bow.

ARIL (*Arillus*). The outer coat of a ſeed falling off ſpontaneouſly: or, incloſing the ſeed partially (*interdum includit partialiter ſemen. Regn. veg.*) As in *Coffea*, *Jaſminum*, *Cynogloſſum*, *Cucumis*, *Dictamnus*, *Dioſma*, *Celaſtrus*, *Euonymus*. Scopoli has diſtinguiſhed ſuch fruits by the name of *Theca*.

ARISTA and *Ariſtātus*. See *Awn* and *Awned*.

ARMS (*Arma*). *Mucrones arcentes animalia, ne lædant plantam*. Thorns, prickles, and ſtings, with which plants are furniſhed for their defence. Enumerated among the *Fulcres*. See *Fulcrum*, *Prickle*, *Stings*, *Thorn*.

ARTICULATUS, Jointed. Articulata radix, *geniculis intercepta*. Articulatus truncus, *internodiis*

diis geniculatus. Articulatum folium, *folio ex apice folii excrefcente. Delin. Plantæ.* See *Jointed.*

Articulāte-pinnatum. See *Pinnatum.*

Articulus. Joint. *Culmi pars geniculis duobus interjecta.* See *Joint.*

Artificial Clafs and Syftem. See *Clafs* and *Syftem.*

Ascending (*Afcendens* v. *Adfcendens*). From a horizontal direction gradually curved or bowed upwards. As the ftems of many plants; the peduncle; the banner of papilionaceous flowers; and the ftyle.

Asparagus. The firft tender fprout, or young fhoot of an herb from the ground, before any leaves unfold themfelves. *Ray.*

Asper, Rough.

Said, in *Delin. plantæ,* to be the fame with *Scaber,* rugged; but it feems to be a term of more extenfive fignification than that. See *Scaber. Exafperatus,* roughened.

Assurgens petiolus. Affurgentia folia. *Arcuatim erecta, primum declinata, dein apice erecta.* Rifing up in a curve, declining at the bafe, but upright at the tip. A rifing petiole—rifing leaves.

Attenuatus pedunculus, fcapus. Attenuated, tapered or tapering. Becoming gradually

fmaller

fmaller towards the flower. Oppofed to *incraffated* or *thickening*. *Attenuatum folium*, a leaf tapering towards one or both extremities.

Auctus *(increafed)* calyx. See *Calyculate*.

Avenium folium. A veinlefs leaf, without perceptible veins.

Auriculatus and *Auritus*. See *Eared*.

Awl-shaped. See *Subulate*. I cannot approve of *Awled*.

Awn *(Arifta)*. A procefs iffuing from the glume or chaff, in corn and graffes. It is commonly called in Englifh *the Beard*, but this term is otherwife applied. See *Beard*.

The Awn is either

Terminating, fixed to the top of the glume: or
Dorfal, placed on the back or outfide of it.

It is alfo

Straight.
Geniculate, or bent like the knee joint.
Recurved, or bowed back.
Twifted (tortilis), or coiled like a rope.

The Anther fometimes terminates in an awn.

Awned *(Ariftātus)*. Having an awn. As the glume and anther.

Awnless (*Muticus*). Having no awn; oppofed to *awned*. As in the glume of *Agroſtis* and *Aira*; the calyx of *Serratula*; the feeds of *Adonis*, &c. An awn however is faid to be *mutica*, when it is not fharp-pointed; *acumine deſtituta*.

Axe-form. See *Dolabriform*.

Axil or *Axilla*. The angle formed by a branch with the ftem, or by a leaf with the branch. So named from its fimilarity to the armpit. Some old writers call it *Ala*, but this term is otherwife appropriated.

Axillary leaves. Growing at the angles formed by the branches with the ftem; or, inferted at the bafe of the branch. Axillary peduncle, fcape, cirrus or tendril, and thorn; proceeding from the axils.

B

Bacca, a Berry.

Bacciferous. Berry-bearing.

Banner or Standard (*Vexillum*). The upper petal of a papilionaceous corolla.

Barb (Γλωχις, *Glochis*). A ſtraight proceſs, armed with ſeveral teeth pointing backwards, like the ſting of a bee. This is one ſort of pubeſcence in plants; and is diſtinguiſhed from the hook (*hamus*) by the point not being bent.

Barba. See *Beard.*

Barbātus. See *Bearded.*

Bark. The ſkin or outer covering of a plant. This is threefold.—1. The cuticle, *Epidermis.* 2. The outer bark, *Cortex.* 3. The inner bark, *Liber.*

Barren (*Sterĭlis*) flower. Not bearing ſeed.

Bay colour, from the Greek Βαϊς, the ſpadix of the Palm; whence it is called *Spadiceus* in Latin.

Beaked (*Roſtrātus*). Terminated by a proceſs, ſhaped like the beak (*roſtrum*) of a bird, applied to fruits.

Beard (*Barba*). In pubeſcence, parallel hairs; or a tuft of ſtiff hairs terminating the leaves, as in *Meſembryanthemum barbatum*.—Rivinus and others give this name to the lower lip of a ringent corolla.—In common language the awn is called the beard.

Bearded (*Barbātus*). Having parallel hairs, or tufts of hairs. Applied to leaves—to the corolla, as in *Dianthus barbatus*, *Gentiana campeſtris*—and to the nectary, as in *Iris*.

Beardless (*Imberbis*). Void of parallel hairs or tufts. As the corolla in ſome ſpecies of *Iris*, *Gentiana filiformis*, &c.

Bell-shaped, Bell-form, or Campanulate Corolla (*Campanulāta*). Swelling or bellying out, without any tube, as in *Campanula*, *Convolvulus*, *Atropa*, *Gentiana*, &c.—This term is applied properly to monopetalous corollas only, although it be ſometimes extended to ſuch as are polypetalous.—Calyxes, as in *Chironia*; and *Nectariums*, as in *Narciſſus*, are alſo bell-ſhaped. Tournefort has a claſs of *Campanulate* or Bell-ſhaped flowers.

I cannot approve the uſe of the term *bell'd*.

Bellying or Bellied (*Ventricoſus*). Swelling out in the middle. Applied to the ſpike—to the perianth, as in *Æſculus*—to the corolla, as in *Digitalis*. If any one ſhould object to this term as vulgar, he may uſe the word *Ventricoſe* inſtead of it; but I do not ſee why Botaniſts may not ſpeak of a *bellying* corolla, with as much delicacy as Poets of *bellying* ſails.

Berry (*Bacca*). A ſucculent or pulpy pericarp or fruit, without valves, containing naked ſeeds. Theſe are ſometimes diſperſed looſe among the pulp (*nidulantia*), as in *Nymphæa*; but they are generally placed on receptacles, as in *Currant*, *Gooſeberry*, &c.

Many fruits, having the appearance of Berries, but not correſponding with the definition, are improperly ſo called—as *Xanthium*, *Capſicum*, *Rhus* or *Sumach*, *Cyclamen*, *Meſpilus*, *Citrus* or *Orange* and *Lemon*, *Taxus* or *Yew*, *Bromelia* or *Pine-apple*.

Such alſo as are formed by any part except the pericarp are improperly called Berries—as a large ſucculent calyx, in *Mulberry*, *Roſe*, *Blite*, *myrtle-leaved Sumach* (Rhus Coriaria)—the receptacle, in *Strawberry* and *Caſhew-nut*—the nectary, in *Marvel of Peru*—the tube of the corolla, in *Poterium* and *Sanguiſorba*.

Such fruits as *Mulberry*, *Raſpberry* and *Blackberry*, being uſually regarded as berries, might very well be called *Compound Berries*, each of the component parts, which are called *Acini*, being a ſmall berry, containing one ſeed immerſed in the pulp.

Bicapsular (*bicapſulāre*) pericarp. Having two capſules containing ſeeds, to each flower. As in *Pæonia*.

Bicornes (two-horned). Plants with anthers having two horns. The name of the twenty-fourth order, in Linneus's fragments of a natural arrangement.

Biennial root. Enduring two years, and then periſhing. In biennial plants a root and leaves are formed during the firſt year, and in the ſecond the fructification is completed.

Bifarious leaves (*Bifāria folia*). Pointing two ways; or, coming out only on oppoſite ſides of a branch.

Bifariouſly hairy, ſtem or branch. When the hairs between any two joints come out on the front and back; and in the two adjoining internodes, on the right and left ſides.

Biferous plants. Bearing twice in a year. Common in hot climates.—"*Biferique roſaria Pæſti.*" Virg.

Bifid, two-cleft, or cloven. Leaf—Perianth, as in *Utricularia*—Stigma.

See *Cleft*.

Biflorous peduncle (*pedunculus biflorus*). Two-flowered, or bearing two flowers.

Bigeminate leaf (*folium bigeminum*). A decompound leaf, having a dichotomous or forked petiole, with ſeveral folioles or leaflets at the end of each diviſion. *Bigemina folia, petiolo dichotomo apice annectent foliola plura.*

Bijugous leaf (*folium bijŭgum*). A pinnate leaf having two pairs of leaflets.

Bilabiate or two-lipped corolla (*bilabiāta corolla*). As in *Pinguicula*, and the claſs *Didynamia*. See *Labiate*.

Bilamellate ſtigma (*ſtigma bilamellatum*). The form of a flatted ſphere, longitudinally bifid. *Globus compreſſus & longitudinaliter bifidus.*

Bilobate leaf (*folium bilobum*). Divided into two lobes. See *Lobus* and *Lobatum*.

Bilocular pericarp (*biloculare pericarpium*); two-celled, divided into two cells internally; as in *Hyoſcyamus*, *Sinapis*, *Nicotiana*, &c. Some ſeeds are alſo two-celled, as in *Cornus*, *Xanthium*, *Valeriana Locuſta*, *Cordia*.

BINA folia. Two-fold leaves; or rather coming out two and two together, from the fame place, or at the fame joint of a branch.

BINATE leaf (*binàtum folium*): *digitatum foliolis duobus terminatum*. Having a fimple petiole connecting two leaflets at the top of it: a fpecies of digitate leaf, which fee. *Binati pedunculi*, Peduncles growing in pairs; as in *Capraria*, and *Oldenlandia zeylanica*.

BIPARTITE, leaf, perianth, corolla. Divided into two parts to the bafe. See *Parted*.

BIPINNATE or doubly-winged, Leaf or Frond. When the common petiole has pinnate leaves on each fide of it: as in *Athamanta Libanotis*, *Anemone Pulfatilla*, &c. and many of the *Ferns*.

BIPINNATIFID or doubly-pinnatifid, Leaf. When the common petiole has pinnatifid leaves on each fide of it. See *Pinnatifid*.

BITERNATE or doubly-ternate Leaf. When a petiole has three ternate leaflets. As in *Epimedium*.

Bitten root, leaf, corolla. See *Præmorfum*.

BIVALVE,

Bivalve, or two-valved Pericarp. In which the covering, or feed-cafe fplits into two parts, as in *Chelidonium*, all the *Siliques* and *Legumes*.— The glume or chaff, which is the calyx and corolla of corn and graffes, is generally bivalve, or confifting of two pieces.

Bladder. See *Veficle*.

Bliftered. See *Bullate*.

Bloffom, in common language, is the corolla of fruit-trees. Dr. Withering makes it the Englifh term for corolla.

Blunt or *Obtufe*; Leaf, Perianth, Capfule. Ending in a fegment lefs than that of a circle.

Boat-shaped, Navicular or Cymbiform; as the valve of fome pericarps, and the carina of papilionaceous flowers. Hollowed and refembling a boat in fhape.

Bole, the naked trunk of a tree.

Border or Brim (*Limbus*). The upper fpreading part of a monopetalous or one-petalled corolla. See *Limbus*.

Botany (From Βοτανη, an herb or plant). That branch of Natural Hiftory which treats of Vegetables.

"*Botanicus*

" *Botanicus eſt ille, qui Vegetabilia ſimilia ſimilibus, et diſtincta diſtinctis nominibus, cuicunque intelligibilibus, noſcit nominare.*" Lin.

Bough. A ſubdiviſion of the trunk, in a tree. See *Branch*, which is of a more extenſive ſignification.

Bowed (*arcuatus*). Bent like a bow. Applied to frond, filament, anther, legume. *Flexus*, with its derivatives, ſignifies—bent at an angle.

Bowed in (incurvus) is perhaps better expreſſed, *curved inwards:* and inflexus, *bent inwards.*

Brachiate (from *Brachium*, the arm). Having branches (ſtretched out like arms) in pairs, decuſſated, all nearly horizontal, and each pair at right angles with the next.

Bractea, Bracte, or Floral leaf. " *Sequentis anni* " *folia. Delin. pl.—Bractea florum, ad florum* " *pedunculorumve baſin, foliacea.*" One of the ſeven fulcres or props of plants. A leaf different from the other leaves in ſhape and colour, generally ſituated on the peduncle, and often ſo near the corolla as eaſily to be miſtaken for the calyx, as in *Hellebore, Nigella,*

Paſſion-

Paſſion-flower, Hepatica, Peganum. The calyx however withers when the fruit is ripe, if not before; whereas the bracte is generally more permanent.

Bractes are either *green* or *coloured. Deciduous—Caducous*—or *Permanent. One, two* or *more.*

Inſtances of remarkable bractes may be obſerved in *Lime-tree, Melampyrum, Monarda, Salvia, Lavandula, Bartſia, Hebenſtreitia, Muſſaenda, Fumaria.* See *Coma.*

It ſeems better to preſerve the term *Bractea,* or *Bracte,* than to tranſlate it: for Linneus frequently calls leaves which are near the flower, *Floral leaves,* when they differ from the other leaves, though they are not properly bractes.

BRACTED (*bracteatus*). Furniſhed with bractes; as the peduncle, and Verticil or whorl.

BRANCH (*Ramus*). A diviſion of the main ſtem, ſupporting the leaves and fructification.

BRANCHED or Branching (*Ramoſus*). Furniſhed with lateral diviſions. Oppoſed to ſimple. Applied to the root, as in *Urtica*—to the ſtem; and to briſtles.

When a plant is loaded with many branches, coming forth without order, it is ſaid to be

very

very branching *(ramosissima)*. When it has only a few lateral divisions, it is said to be *subramose*.

Branch-leaves *(Ramea folia)*. Leaves growing on the branches.

Branchlet *(Ramŭlus)*, dimin. of Branch. A subdivision of a branch; a twig.

Branch-peduncle *(ramĕus pedunculus)*. A peduncle springing from a branch.

Bright *(lucĭdum)* leaf. See *Lucidum*.

Bristle *(Seta)*. A species of pubescence, in form of a stiff roundish hair; on the stems, branches, leaves, flowers or fruits: sometimes covering almost the whole surface of plants.

Bristles are either simple or hooked. *Branched*, *feathered* (plumosæ), and *stellate* or *rayed* (stellatæ).

Bristle-shaped: of the thickness and length of a bristle; applied to the structure of a leaf *(folium setaceum)*; shorter therefore than a capillary leaf.

Bristly *(setōsum)*, set with bristles: as some receptacles, which have bristles interposed between the florets. In *Cynara* or *Artichoke*, *Centaurea*, *Echinops*.

Bud or Gem *(Gemma)*. A hybernacle or winter receptacle of leaves and flowers on the ſtem or branches; or, as Linneus expreſſes it, on the aſcending *caudex*. It conſiſts of ſtipules, or petioles, or the rudiments of future leaves, or cortical ſcales.—Hence Buds are called *Stipular*, *Petiolar* and *Cortical*.

Moſt plants in cold countries, but ſcarcely any in hot climates, have buds.

A Bud is

1. Leaf-bearing *(foliaris)*: as in *Alder*.

2. Leaf and flower-bearing diſtinct: as in *Poplar*, *Willow*, *Aſh*.

3. Leaf and female-flower-bearing: as in *Hazel* and *Hornbeam*.

4. Leaf and male-flower-bearing: as in *Pine* and *Fir*.

5. Leaf and hermaphrodite-flower-bearing *(floralis)*: as in *Daphne*, *Ulmus*, *Cornus*, *Amygdalus*.

6. Leaf and flower-bearing together *(communis)*: as in moſt trees.

See *Loefling. Diſſ. de Gemmis, in Amœn. Acad.*

Bulb *(Bulbus)*. A hybernacle, or winter receptacle of a plant, compoſed of the baſes of paſt leaves,

leaves, and placed immediately upon the root. It is vulgarly confidered as a root; and was called fo by Botanifts till Linneus corrected the error, and fhewed that it was a fingle bud, enveloping the whole plant.

A Bulb is 1. Scaly (*fquamatus*), as in Lily. 2. Solid, as in *Tulip*. 3 Coated (*tunicatus*), as in *Onion*. 4. Jointed, as in *Lathræa*, *Martynia*, *Adoxa*.

Some flowers are fucceeded by Bulbs inftead of feeds: as in *Allium*. The ftem, in this cafe, is called *Bulbiferous* or Bulb-bearing.

BULBOUS plants (*Bulbofæ*). Growing from bulbs. The title of a Clafs in Cæfalpinus, Ray, and other fyftematic writers.

Roots that are folid and roundifh, like true bulbs, are alfo called Bulbous; as in *Turnep*, *Ranunculus bulbofus*, &c.

BULLATE leaf (*folium bullatum*). When the fubftance rifes high above the veins, fo as to appear like blifters. It is only a greater degree of the wrinkled leaf (*fol. rugofum*).

BUNDLE or Fafcicle (*Fafciculus*). Several roots, leaves or flowers collected together, or proceeding from the fame point.

A root

A root in bundles (*radix fascicularis*) is a fort of tuberous root, with the tubers or knobs collected in bundles: as in *Pæonia*.

Leaves are fasciculate (*folia fasciculata*), or grow in bundles or bunches, in the *Larch*.

In the fructification, Linneus explains a bundle (*fasciculus*) to be a species of inflorescence, collecting upright, parallel, fastigiate-approximating flowers.

C

CADUCOUS (*Caducus*, from *cado*, to fall). Falling off quickly. Applied to stipules and bractes; to leaves that fall before the end of the summer (*brevi decidentia, nec per integram æstatem permanentia. Delin. pl.*)—to calyxes and petals falling before the corolla is well unfolded.—*Papaver* and *Epimedium* are instances of the caducous calyx: *Actæa* and *Thalictrum*, of caducous petals.—This term is different from *deciduous*; which see.

CALAMARIÆ (from *Calamus*, a reed). The thirteenth order in Linneus's fragments of a natural arrangement in *Philosophia Botanica*; and the third

third of the Natural Orders, at the end of *Genera Plantarum*. It contains the Sedges, and other plants, allied to the Graſſes.

CALCAR corollæ. *Eſt ejuſdem baſis productio coniformis*. See *Spur*.

CALCARATUS calyx: a Calcarate calyx, as in *Tropæolum*. Calcarata corolla: a calcarate corolla, as in *Larkſpur*, &c. Furniſhed with a ſpur. Calcaratum nectarium; a calcarate or ſpur-ſhaped nectary. In ſhape reſembling a cock's ſpur: as in *Larkſpur*, *Antirrhinum*, *Valerian*, *Pinguicula*, *Utricularia*. See *Spur*.

CALYCANTHEMI. The fortieth order in Linneus's fragments of a natural arrangement.

CALYCINE. Of or on the calyx: as calycine ſcales—calycine thorns.

CALYCLE (*Calycŭlus*). A row of ſmall leaflets placed at the baſe of the calyx, on the outſide.—Calycle of the ſeed is the outer proper covering or crown of the ſeed, adhering to it, in order to facilitate its diſperſion. This word is evidently a diminutive of calyx.

CALYCULATE or Calycled (*Calyculatus* ſ. *Auctus*). A calyx having a calycle or little cup at the baſe, on the outſide: as in *Dianthus*, *Coreopſis*, *Bidens*, *Crepis*, *Chondrilla*, *Prenanthes*, *Hedypnois*, *Lapſana*.

Ca-

CALYPTRA, calyptre, or veil (from καλυπτω, to cover). The calyx of mosses, covering the anther like a hood, according to Linneus: but not properly a calyx; and the part which he calls the anther, is in fact a capsule.—Old authors used this term for what Linneus calls the *arillus;* and in this sense *Euonymus* is said to be calyptred, calyptrate or veiled; having a loose covering over the pericarp.

CALYX (*καλυξ* from *καλυπτω*, not *κυλιξ*, *a cup*). The outer covering of the flower, or the first of the seven parts of fructification, formed, according to Linneus, of the *cortex* or outer bark. In another place he explains it to be, the *cortex* or outer bark present in the fructification.—*Tegmentum exterius floris e cortice.* Regn. veget. *Cortex plantæ in fructificatione præsens.* Delin. pl. This term includes not only the *Perianth*, which is often exclusively called the calyx; but also the *Involucre*, *Ament*, *Spathe*, *Glume*, *Calyptre*, and *Volva;* and therefore is of a much more extensive signification than *Perianthium*. The Calyx is frequently called *Empalement* and *Flower-cup* by English writers. With respect to the latter of these names I have observed, that Calyx is not derived from *κυλιξ*, *a cup;* and, if

it be admitted at all, ſhould be confined to what we call the *Perianth*—which ſee.

Campanacei (*Campāna*, a bell). The thirty-ſecond order in the fragments of a natural method, by Linneus: containing plants with bell-ſhaped flowers.

Campanulata, corolla. From *campanŭla* (dimin. of campana) a little bell. See *Bell-ſhaped*—Campanulatus calyx, a bell-ſhaped calyx—Campanulatum neƈtarium, a bell-ſhaped nectary.

Canaliculatum folium (Dimin. from *canālis* a canal or channel). *Supra ſulco profundo longitudinaliter excavatum.* See *Channelled.*

Cancellatus (*Cancelli*, trellis or lattice work). See *Latticed.*

Candelares (*Candēla*, a candle). The ſixty-ſecond order in Linneus's fragments of a natural method.

Capillares. The name for the claſs of *Ferns*, in the ſyſtems of Moriſon, Ray and Boerhaave.

Capillary (*Capillacēus* ſ. *Capillāris*, from *Capillus*, a hair). Long and fine, like a hair.—Applied

plied to leaves, that are longer than the fetaceous or briftle-fhaped leaf; as in *Ranunculus aquatilis*, *Artemifia capillaris*.—To glands, refembling hairs; as in *Ribes*, *Scrophularia*, *Ceraftium*, *Silene*.—To the filaments; as in *Dipfacus*, the *Graffes*, &c.—To the ftyle.—And to the pappus or down, affixed to fome feeds; as in *Sonchus*, *Lactuca*, *Chondrilla*, *Prenanthes*, *Leontodon*, *Hieracium*, *Crepis*, *Andryala*, *Carduus*, *Onopordum*. This is by fome called *pilofus*; and is oppofed to *plumofus* or *feathered*. Ray calls the ftamens, *capillamenta*.

Capillus (a hair). Is fometimes put for a meafure; the diameter of a hair, or the twelfth part of a line.

Capitatæ (*Caput*, a head). The fecond divifion of the twenty-firft order (*Compofiti Capitati*) in Linneus's fragments of a natural method, in *Philofophia Botanica*; and the firft divifion of the forty-ninth order in the *Ordines Naturales*, at the end of *Genera Plantarum* (*Compofitæ Capitatæ*). Alfo the fecond divifion of the firft order, in the clafs *Syngenefia*, in his artificial fyftem; and the ninth clafs in Ray's method. It contains the thiftles and other plants with compound flowers, growing in a head.

Capitatus; capitate, growing in a head. See *Head*.—Applied to flower (*capitatus flos*) and ſtigma (*capitatum ſtigma*).

Capitulum (dimin. from *caput*). *Conſtat floribus plurimis in globum ferme congeſtis: Gomphrena.* See *Head*.

Capreolus (dimin. from *caprea; or a capiendo*). See *Cirrus* and *Tendril*.

Capsule (*Capſŭla*, a little cheſt or caſket). *Pericarpium cavum determinate dehiſcens.* Delin. pl. & Philoſ. bot.—*Membranacea, valvis dehiſcens varie in variis.* Regn. veg.—A membranaceous hollow pericarp, opening in ſome determinate manner—or, differently in different plants. The parts of which a capſule is compoſed, are—1. The Valves or outer covering (*valvulæ*). 2. The Partitions (*diſſepimenta*). 3. The Columella or central pillar. 4. The Cells (*loculamenta*). See all theſe terms explained in their proper places. Inſtances of capſules may be obſerved in *Tulip*, *Crown Imperial*, *Iris*, *Poppy*, &c. &c.

Capſules are diſtinguiſhed from the number of their valves and cells. Thus we ſay, a five-valved capſule, or a capſule of five valves: a two-

celled

celled capſule, or a capſule of two cells. Bilocular is not ſo proper, becauſe we tranſlate *loculamentum* by the term cell.

Some flowers are ſucceeded by more capſules than one: ſuch fruits are called bicapſular, two-capſuled, or fruits of two capſules, &c. according to the number ſucceeding to each flower.

Capſules are *twin* or double (*didymæ*)—*dicoccous*, or two-grained—*tricoccous*, or three-grained. — *Jointed* (articulatæ). — *Circumſciſſæ*, opening in the middle tranſverſely into two hemiſpheres. *Elaſtic*, or opening with a ſudden ſpring. *Inflated*, or puffed up like a blown bladder.

CARINA. The lower petal of a papilionaceous corolla. See *Keel.*

CARINATED. *Calyx carinatus*, a keeled calyx. *Folium & nectarium carinatum*, a keeled leaf, and nectary. Having a longitudinal prominency upon the back, like the keel of a veſſel.

CARNOSUM folium. A Fleſhy leaf. See *Fleſhy.*

CARTILAGINOUS leaf (*Cartilagineum folium*). Having the edge ſtrengthened by a tough rim of a ſubſtance very different from the diſk—*margine ſuboſſeo.*

Caryophyllæus flos—caryophyllæa corolla. Resembling that of a single pink or carnation (*Caryophyllus*); having five regular petals, ending at bottom in a long, narrow claw. This is a term used by Tournefort: but hence Linneus has constituted an order of plants, called *Caryophyllææ*, in his fragments of a natural method, and his natural orders.

Castrata stamina s. filamenta. Without anthers; as in some species of *Geranium*.

Catkin and *Catulus*. See *Ament*.

Cauda. See *Tail*.

Caudex (from *cædo*, to cut down). The stem or trunk of a tree. According to Linneus, when a seed germinates, the descending stem (*caudex descendens*) terminates in roots; the ascending stem (*caudex ascendens*), in branches and leaves.

Caulescent plant (*planta caulescens*). Having a stem different from that which produces the flower. Opposed to *Acaulis* or *Stemless*. Linneus applies this term to the root also: as in *cabbage*, *navew* and *turnep*.

Cauline leaf. Growing immediately on the stem, without the intervention of branches. Applied

Applied alſo to the bulb, peduncle and ſcape. *Caulinus bulbus, pedunculus, ſcapus—caulinum folium.*

Caulis (καυλος). But the ſignification of the Greek word is more extenſive than that of the Latin, for it comprehends the trunk of a tree, whereas the Latin term is confined to the ſtalk of herbs only. Our Engliſh *Kale*, and *Cole* (in Colewort and Coleſeed) come from *caulis*, as well as *Cauliflower* vulgarly *Collyflower*: but immediately from the Low-Dutch *Kool*. See *Stem*.

Cell (*Loculamentum*). The hollow part of a pericarp, and particularly of a capſule, in which the ſeeds are lodged.—According to the number of theſe, pericarps are called *one-celled*, *two-celled*, &c.

Cernuus (*q. qui terram cernat*) flos ſ. pedunculus. *Apice terram ſpectans.—Cum apice incurvatur, ut flos verſus latus alterum vel terram nutet; nec poterit erectus attolli ob curvaturam ſtrictam pedunculi.* It may be tranſlated *drooping*, and muſt be diſtinguiſhed from *Nutans*, *nodding*. See theſe words.

Cespitosa planta (*Ceſpes*, turf). *Cum multi caules ex eadem radice prodeunt.*—A ceſpitoſe

or turfy plant, has many ſtems from the ſame root, uſually forming a cloſe thick carpet.

CHAFF (*Palĕa*). The dry calyx of corn and graſſes, in common language; by Linneus called *Gluma*. See *Glume*. Alſo,

A dry membranaceous body interpoſed between two florets, in ſome of the claſs *Syngeneſia*.

CHAFFY receptacle; *paleacĕum receptaculum*. In which the florets are divided by interpoſed chaffs or ſcales. As in *Dipſacus*, *Scabioſa*, *Hypochœris*, *Catananche*, *Arctium*, *Onopordum*, *Serratula*, *Bidens*, *Santolina*, *Athanaſia*, *Xeranthemum*, *Zinnia*, *Anthemis*, *Achillea*, *Verbeſina*, *Sigeſbeckia*, *Buphthalmum*, *Helianthus*, *Rudbeckia*, *Coreopſis*, *Silphium*.

CHANNELLED (*canaliculatus*). Hollowed above with a deep longitudinal groove; convex underneath. Applied to the ſtem, leaf, and petiole.

CHARACTER. The peculiar circumſtance or circumſtances that diſtinguiſh a vegetable, or a ſet of vegetables from all others. Characters are *Specifical*, *Generical*, or *Claſſical*—*Eſſential*, *Natural*, or *Artificial*. See *Claſs*, *Genus*, *Species*: *Eſſential*, *Factitious*, *Natural*.

CHINKED (*Rimosus*). Applied to the outer bark of trees, especially old ones.

CHIVE. Put by some English writers for *Stamen*.

CICATRISATUS truncus s. caulis. A scarred stem. Marked with the remains of leaves that have fallen off.

CILIATUM folium. A ciliate leaf. The edge guarded by parallel bristles longitudinally: as in *Drosera, Crassula coccinea* & *cymosa, Erica tetralix* & *ciliaris*, &c.—It is applied also to the Stipule—the Spike—and the Corolla; as in *Rue, Menyanthes, Tropæolum*.

This term is frequently but improperly translated *Fringed*, which answers to the Latin *Fimbriatus*. See these words.

CINEREOUS. The colour of wood ashes.

CIRCINALIS vernatio. *Quum folium in spiram transversalem coarctatum sit; ut apex centrum obtineat.* Delin. pl.—*Circinalia folia, quum deorsum spiraliter involvuntur.* Philos. bot.—A term in foliation or leafing; importing that the leaves are rolled in spirally downwards, the tip occupying the centre. As in *Ferns*, and some *Palms*.—For this we have no equivalent English

English term, unless we may use the word *spi-ral*, which scarcely expresses the idea.

CIRCUMSCISSA capsula. *Quæ maturo fructu horizontaliter discedit. s. quæ media fere parte in hemisphæria duo dissilit.*—Opening, not longitudinally or vertically, as in most capsules, but transversely or horizontally, like a snuff-box; usually about the middle, so as to fall nearly in two equal hemispheres. Instances of this we have in *Anagallis*, *Hyoscyamus*.

CIRRIFERUM folium: A tendril-bearing leaf, as in *Fumaria capreolata* & *claviculata*. Cirriferus pedunculus: a tendril-bearing peduncle; as in *Cardiospermum* and *Vitis*.

CIRROSUM folium: a cirrose leaf. Terminating in a cirrus or tendril: as in *Gloriosa*, *Flagellaria*, *Lathyrus*, &c.

CIRRUS (*Cirri*, *capilli intorti*, frizzled hair). Some derive it from κερας, *a horn*; others from κειρειν, *to shear*; others from σκιρρος, *a hard tumour*; others again from *circum*, q. capilli circum torti: such is the uncertainty of derivation.—Linneus explains it to be—*vinculum filiforme spirale, quo planta alio corpori alligatur.*—He writes it with an *h*.—See *Tendril*.

CLAMMY. *Viscidus.*

CLASPER. See *Tendril.*

CLASPING, stem-clasping, embracing leaf (*folium amplexicaule*). Surrounding the stem at the base.

CLASS (*Classis*). The primary division in a system or arrangement. Tournefort defines it to be—*congeries generum, quibus nota quædam communis adeo propria est, ut ab aliis omnibus generibus plantarum prorsus differat.* An assemblage of genera, in which some common mark is so peculiar, that it differs entirely from all other genera of plants.—According to Linneus it is—*generum plurium convenientia in partibus fructificationis, secundum principia naturæ & artis.* The agreement of several genera in the parts of fructification, according to the principles of nature and art.

Classes are either *Natural* or *Artificial.* Natural Classes are such as contain genera which are evidently related to each other: as *Umbellate, Verticillate, Siliquose, Leguminose* plants, the *Compound* flowers, and *Grasses.*

Artificial Classes are merely succedaneums to natural ones, which we are obliged to adopt for want of a complete knowledge of the true

characters

characters of plants, and their relations to each other.

Natural Classes have been attempted by Royen, Haller, Linneus, and lately by Jussieu.

Linneus's artificial system or general arrangement of vegetables has twenty-four classes, besides the Palms, &c. in a twenty-fifth. These are founded principally on the number, situation, and proportion of the stamens; and several of them are natural.

Clavatus (*clava*, a club) club-shaped. *Versus apicem incrassatus;* growing gradually thicker toward the top. Applied to the leaf, as in *Anabasis foliosa*—to the petiole and peduncle—to the calyx, as in *Silene*—to the style, as in *Leucoium vernum*—to the capsule, as in *Papaver Argemone*.

Clavicula. The same with *Capreolus* or *Cirrus*. See *Tendril*.

Claw (*Unguis*). The lower narrow part of the petal in a polypetalous corolla, by which it is fixed to the receptacle.

Cleft leaf (*folium fissum*). Divided by linear sinuses, with straight margins. According to the number of these divisions, such a leaf is called

called bifid, trifid, quadrifid, quinquefid, multifid; or two-cleft, three-cleft, &c.—The term is alſo applied to the Perianth, and to Stipules, in the ſame manner.

Climbing plant (*Scandens*). Aſcending by means of tendrils; or ſometimes by the ſtem or branches; but without twining, which ſee.

Club-shaped (*Clavātus*). Growing thicker toward the top. See *Clavatus*.

Clustered or crowded (*Confertus*.) See *Crowded*.

Coadunata folia (Coadunate leaves). Several joined together, or united at the baſe.

Coadunatæ, the fifty-ſecond of Linneus's natural orders.

Coarctatus. Squeezed or preſſed together. Coarctati rami; *verſus ſummitatem fere incumbentes*: condenſed branches. Oppoſed to *divergentes*.—See *Condenſed*. Coarctati pedunculi: condenſed peduncles; oppoſed to *patuli*. Coarctata panicula; a cloſe or contracted panicle; oppoſed to *diffuſa*.

Coated or tunicated (*tunicātus*). Compoſed of concentric layers; as the bulb of the Onion: or clothed with membranes; as ſome ſtems.

COBWEBBED (*arachnoideus*). Covered with a thick interwoven pubefcence. Applied to the leaf, peduncle, and calyx.

COCCUM (κοκκον), a grain or feed. Linneus applies this term to fome fruits of a particular ftructure, having feveral cells with a fingle feed in each. Thus *Euphorbia* and *Thea* have a tricoccous fruit; *Geranium* has a pentacoccous or five-grained fruit.

COCHLEATUM legumen. A fcrew-fhaped, or fnail-fhaped legume or pod. Turned like a fcrew, or the fhell of a fnail. As in *Medicago*.

COILED (*tortilis*). Bent or twifted like a rope. See *Tortilis* and *Twifted*.

COLLUM. The neck or upper part of the tube, in a monopetalous corolla.

COLOURED leaf. Of any other colour than green. Calyx, as in *Bartfia*.

COLUMELLA. The central pillar in a capfule. *Pars connectens parietes internos cum feminibus.* Philof. Bot. The part connecting the infide with the feeds. *A receptaculo adfcendens, circumcirca femina affigens.* Delin. pl. Taking its

rife

rise from the receptacle, and having the seeds fixed to it all round.

COLUMNAR (*Teres*). Like the shaft of a column. See *Teres*.

COLUMNIFERÆ (*plantæ*) or *columniferi* (*flores*). The name of the thirty-fourth order, in the fragments of a natural method, in Linneus's *Philosophia Botanica*: the thirty-seventh of his natural orders, at the end of *Genera Plantarum*: and the fourteenth order of Royen's system. It includes the Malvaceous, or Mallow-like plants; which are to be found in the class *Monadelphia* of Linneus's artificial system.

COMA (Κομη, *a head of hair*). A species of bracte, terminating the stem in a tuft or bush. As in *Crown Imperial*, *Salvia Horminum*, *Sylvestris*, *Sclarea*, &c.—A spike of flowers terminated by a coma is named *Comose*: and plants with such flowers are ranged in the thirty-sixth of the natural orders, in Linneus's *Philosophia Botanica*.

COMMON bud (*communis gemma*). Containing both leaves and flowers. Common peduncle (*communis pedunculus*). Bearing several flowers.—Common perianth; inclosing several distinct fructifications, as in the class *Syngenesia*. Common receptacle; connecting several distinct fructifications; as in the same class.

COM-

Compact leaf. Having the pulp of a close consistent texture.

Complete flower. Furnished both with calyx and corolla. Delin. Pl.—This is one of Vaillant's terms. It would with more propriety be termed complete, when it has all the parts of a flower. See *Flower*.

Complicate (*complicâtus*). Folded together: as the valves of the glume or chaff in some grasses.

Compositæ. The name of the twenty-first order in the fragments of a natural method in Linneus's *Philos. Botan.*—the forty-ninth of the natural orders in his *Gen. Pl.*—in Royen's system, and others. Comprising the plants with compound flowers.

Compound (*compositus*). *Stem*: dividing into branches.—*Leaf*: connecting several leaflets on one petiole, which in this case is called a common petiole.—*Flower*: a species of aggregate flower, containing several florets, inclosed in a common perianth, and on a common receptacle; with the anthers connected in a cylinder: as in the class *Syngenesia*.—*Raceme*: composed of several racemules, or small racemes.—*Spike*: composed of several

spicules

ſpicules or ſpikelets.—*Corymb:* formed of ſeveral ſmall corymbs.—*Umbel:* having all the rays or peduncles bearing umbellules, or ſmall umbels, at the top.—*Fructification:* conſiſting of ſeveral confluent florets; oppoſed to ſimple.

COMPOUND terms. Two terms forming one idea, much uſed by Linneus. It ſhould be obſerved that theſe may be framed with propriety from figures, &c. of the ſame diviſion only. Thus *lanceolate-ovate* and *ovate-lanceolate* are proper; but not *lanceolate-acute*, or *ovate-mucronate.*—Delin. pl.

COMPRESSED or flatted (*compreſſus*). Applied to a ſtem, which has the two oppoſite ſides plane or flat—to a leaf, which is pulpy, with the ſides more flatted than the diſk. Oppoſed to *depreſſed* in Delin. pl.—to a ſiliqua, which has the oppoſite ſides approaching to each other.

CONCAVE leaf. When the edge ſtands above the diſk: or, as Linneus expreſſes it, when the margin of the leaf being too tight to circumſcribe the diſk, the diſk is depreſſed.—Applied alſo to the corolla; and to the valves of the glume in graſſes.

CONCEPTACLE or Follicle (*Conceptaculum, Folliculus*). A Pericarp of one valve, opening

longitudinally on one side, and having the seeds loose in it. As in *Apocynum, Asclepias, Stapelia.*

Condensed branches (*coarctati rami*). Pressed or squeezed together, so close, as almost to be incumbent, or lie over each other, at their ends.

Conduplicate, doubled together. *Conduplicata vernatio* s. *foliatio.* A term in vernation or leafing; signifying, that in the bud, the two sides of the leaf are doubled over each other at the midrib. *Cum folii latera (intra gemmam) parallele sibi invicem approximantur.* As in *Rose, Ash, Walnut, Almond, Cherry, Oak, Beech,* &c.—It is used also in the sleep of plants (*conduplicans somnus*) in the same sense: when the leaves, during the night, fold together, like the leaves of a book.

Cone (*Conus*). The fruit of several evergreen trees, as *Fir, Pine, Cedar, Cypress.* Linneus has discarded this term, and has adopted that of *Strobilus,* which however is of more extensive signification; comprehending fruits, as of *Magnolia,* not called cones in common language. See *Strobilus.*

A *Cone* is broadest at the base, or next the point

point of union with the branch, and tapers more or lefs to the end. It is compofed of woody fcales, ufually opening, and has a feed at the bafe of each fcale. Though Linneus has difcarded the term Cone, he has retained an order of coniferous plants. See *Coniferæ*.

CONFERTUS. Crowded or cluftered. *Conferta folia*; leaves fo copious, as to occupy the whole of the branches, fcarcely leaving any fpace between; as in *Antirrhinum monfpeffulanum* and *Linaria*. *Conferti rami*; branches fo clofe, as fcarcely to leave any fpace between them: oppofed to *remoti*. *Confertus verticillus*, a clofe or crowded whorl, in which the peduncles, or flowers, are as it were fqueezed together: oppofed to *diftans*.

CONFLUENT leaves (*folia confluentia*). *Ad bafin inter fe cohærentia*; united at the bafe: growing in tufts, fo as to leave the intermediate parts of the ftem bare. *Confluent lobes*; running one into another: in oppofition to *diftinct*.

CONFORME folium. A leaf in all parts the fame. *Conformis torfio*. Twifting (of a ftem) always the fame way.

CONGESTUS, heaped together. *Congefta panicula*: a panicle which has a great abundance of

 flowers,

flowers, but not so closely squeezed together as in the crowded or dense panicle.

CONGLOMERATE (*con* and *glomus*, a clue of yarn or thread) flowers or peduncles. When a branching peduncle bears flowers on very short pedicles, closely heaped and compacted together, without order. As in *Dactylis glomerata*. Opposed to *diffused*. See *Glomerate*.

CONIC or CONICAL *receptacle*. In shape of a cone, round and broad at the base, but drawing to a point at the top. As in *Bellis* (the common Daisy), *Anthemis*, &c.

CONIFERÆ. The fifteenth order in Linneus's fragments of a natural method: and the fifty-first of the natural orders, at the end of *Gen. Pl.* Containing the cone-bearing trees. As *Fir*, *Pine*, *Cypress*, *Thuja*, &c.

CONJUGATE *leaf* (*folium conjugatum*). A pinnate leaf which has only one pair of leaflets. *Conjugate raceme*: having two racemes only, united by a common peduncle.

CONNATE leaf (*folium connatum*). When two opposite leaves are so united at their bases as to have the appearance of one leaf: as in the *Garden Honeysuckle*.—This term is applied also to filaments

filaments and anthers, united into one body; as in the classes *Monadelphia* and *Syngenesia*.

CONNIVENS corolla. *Cujus limbi lobi apicibus convergunt. Connivens somnus; quando duo folia opposita pagina superiore tam arcte ad se mutuo applicantur, quasi unicum esset folium.—Conniventes antheræ.* See *Converging*.

CONTORTÆ (*Contorqueo, to twist*). The twenty-ninth order in the fragments of a natural method, in *Philos. bot.* and the thirtieth of the natural orders in *Gen. pl. Lin.*

CONTORTA corolla. *Cujus petalorum margo alter incumbens alteri obliquam directionem habet.* A *contorted* corolla has the edge of one petal lying over the next, in an oblique direction. As in *Vinca.—Contortum pericarpium. Cujus apex non in eadem cum basi linea est.* A *contorted* pericarp is that, which has the apex in a different line from the base. This means no more than twisted.

CONTORTUPLICATUS. See *Writhed*.

CONTRACTA *panicula.* A contracted panicle. Close and narrow, so as very much to resemble a spike. As in *Festuca calycina*.

CONTRARIUM *dissepimentum.* See *Partition*.

Converging (*connivens*). Applied to the corolla, when the tips of the petals meet ſo as to cloſe the flower; as in *Trollius*: to anthers, approaching or inclining towards each other; as in the claſs *Didynamia*: to the ſleep of plants; when two oppoſite leaves are ſo cloſely applied to each other by their upper ſurfaces, as to ſeem one leaf.

Convex leaf (*folium convexum*). *Quod in diſco magis elevatum eſt.* Philoſ. bot.—*Margine diſco arctiore (depreſſiore) ut elevetur diſcus.* Delin. pl. Riſing towards the centre; or, with the edge more contracted than the diſk, ſo that the diſk is raiſed.

This term in *Philoſophia Botanica* is oppoſed to *depreſſed*, and has reference to the ſubſtance of a leaf; whereas in *Delin. pl.* it refers to the mode of its expanſion, and is oppoſed to *concave.* It is applied alſo to the *Receptacle*, which riſes towards the middle: as in *Tanſy*, *Chryſanthemum*, *Matricaria*, *Buphthalmum*.

Convoluted (*convolutus*) Leaf. *Foliorum lateribus cuculli in modum ſpiraliter contortis.* Delin. pl. A term in vernation or foliation, ſignifying that the ſides of the naſcent leaves are rolled together like a ſcroll: as in *Arum*, *Piper*, *Solidago*, *Braſſica*, *Prunus*, *Gramina* or *Graſſes*.—

This

This is applied also, in the same sense, to the petals and stigmas, as in *Crocus*.—*Tendril (Cirrus)*. *In annulos contortus*, twisted into rings or spirals.

CONUS. See *Cone* and *Strobile*.

CORCULUM (dimin. from *Cor*, the heart). The *corcle*, *heart*, or essence of the seed. The rudiment of the future plant. Attached to and involved in the cotyledons. Consisting of the *plume*, or scaly ascending part; and the *rostel*, or *radicle*, the simple descending part.—*Novæ plantæ compendium, connectens Cotyledones; constans Rostello acuminato, deorsum germinante. Plumula imbricata, sursum excrescente.* Regn. veg.

CORDATE or heart-shaped leaf *(folium cordatum)*. So called, from its resemblance to the longitudinal section of the heart.—Ovate or subovate, hollowed at the base, without any angles there. *Ovatum, basi excavatum, destitutum angulis posticis.*

Cordate-oblong. A heart-shaped leaf lengthened out.

Cordate-lanceolate, *Cordate-sagittate*, &c. Partaking of the form of both leaves.

Coriaceous. Stiff like leather or parchment. Applied to the leaf, calyx, and capſule.

Cornered or *angular* ſtem: 3—6, cornered (*trigōnus*, &c.) Having three, &c. prominent longitudinal angles.

Cornu. A horn or ſpur at the back of ſome flowers. See *Horn.*

Corolla (dimin. from *corona*, a crown). *Liber plantæ in flore præſens.* Philoſ. bot. & Delin. pl. *Tegmentum interius floris e libro.* Regn. veg.—The ſecond of the ſeven parts of fructification; or, the inner covering of the flower, formed, according to Linneus, of the *liber* or inner bark of the plant.

It may commonly be diſtinguiſhed from the perianth, by the fineneſs of its texture and the gayneſs of its colours: whereas the perianth is uſually rougher and thicker, and green. But there are many exceptions; the perianth in *Bartſia* is coloured—the corolla in *Daphne Laureola* is green.—Linneus makes the diſtinction between the *corolla* and *perianth* to conſiſt, in the former having its ſegments, or petals alternate with the ſtamens; whereas the latter has its parts or leaflets oppoſite to them. This appears from the inſpection of the claſſes

Tetran-

Tetrandria and *Pentandria*, in flowers which have both parts; and of *Chenopodium*, *Urtica*, *Parietaria*, which have no corolla. See *Philos. bot.* p. 57, § 90.

Adanſon however obſerves, that in the Liliaceous plants, what is called a corolla, is in reality a perianth, according to the principles of Linneus. That part which is named corolla of Rhamnus, in *Lin. gen.* is called calyx in *Syſt. veget.*—and on the contrary, the calyx or perianth of Polygonum in *Lin. gen.* is the corolla in *Syſt. veg.*

To get rid of the difficulty, which ſometimes occurs in diſtinguiſhing the corolla from the calyx, De Necker has cut the knot, and called them by one name, *Perigynanda*; which ſignifies the envelope, cover or wrapper of the ſtamens and piſtils: this he diſtinguiſhes into inner and outer, when there are two—then the firſt is the corolla, and the ſecond the perianth.

I prefer *corolla* to *corol*, becauſe it is a legitimate Engliſh word, as well as the other, with a better ſound; but eſpecially becauſe it has generally obtained place among us. Some chooſe to tranſlate corolla by *bloſſom*; but bloſſom has a more contracted ſignification in Engliſh, being uſually applied to the flowers

 of

of fruit-trees. Beside this, it is contrary to the principles that ought to regulate us in forming technical terms.

The Nectarium or Nectary is considered as a part of the corolla.

The corolla is frequently, but inaccurately called the flower. See *Flower*.

The diminutive *Corollet* or *Corollule* (Corollula) is used in speaking of the florets in aggregate flowers.

Corona. See *Crown*.

Coronariæ. The ninth order in Linneus's fragments of a natural method; and the tenth of his natural orders; containing part of the Liliaceous plants; such as for their beauty are adapted to the making of garlands (coronæ).

Coronula (dimin. of *corona*) a coronet or little crown to the seed.

Cortex (from *corium* a hide, and *tego* to cover). The *outer bark* of a vegetable, or the second integument within the epidermis; plated, lax, dry, hard, often in chinks.—*Secundum integumentum plantæ, laminosum, laxum, siccum, durius, sæpe rimosum.*

Cortical bud (*Corticalis gemma*). Having its origin

origin from the ſcales of the bark—*e corticis ramentis*.

CORYDALES, (from *κορυς, a helmet*). The twenty-eighth order in Linneus's fragments of a natural method, and the twenty-fourth of his natural orders.

CORYMB (*Corymbus*). Linneus's words are—*fit ex ſpica, dum ſinguli flores petiolis propriis inſtruuntur, ſitu elevato proportionali.*—It is made up of a ſpike, whilſt each flower is furniſhed with its proper petiole [peduncle], in an elevated proportional ſituation.—I confeſs that I do not clearly underſtand this explanation of the term.—In Lee's Introduction it is thus expreſſed—" Corymbus is a kind of ſpike, the " flowers of which have each its proper Pedi- " cellus, or partial footſtalk raiſed to a propor- " tional height."—In Roſe's Elements it ſtands thus—" The *Corymbus*, where the leſſer flower- " ſtalks of unequal lengths are produced along " the common peduncle on both ſides, and " riſe to the ſame height, ſo as to form a flat " or even ſurface at top."—Berkenhout ſays— " Linneus makes it a ſpecies of infloreſcence, " in which the flowers grow in cluſters, each " upon a ſeparate *pedunculus*, as in the ſiliquoſe " plants in general."—Roſe's explanation is the moſt

moſt intelligible, but it is not Linneus's.— There is plainly a reference to the ſpike for the general ſimilitude, with two diſtinctions — 1. That each flower is not ſeſſile, but on its proper pedicel. 2. That inſtead of the flowers being ranged along a common ſimple peduncle alternately, as in the ſpike; each pedicel is of a length proportioned to its ſituation, ſo that all the flowers form nearly a flat ſurface at top. If this be not the ſenſe intended by *ſitu elevato proportionali*, I am at a loſs for a meaning.— After all, the meaning of the term will be beſt underſtood by attending to the manner of flowering in the plants referred to by Linneus. *Spiræa opulifolia*, *Ledum*, and thoſe of the *Siliquoſæ* or *Tetradynamia* claſs. A corymb may be either *ſimple* or *compound*. Corymbus, in Pliny, ſignifies a cluſter of ivy berries—"*hederæ racemus in orbem circumactus*." Columella puts it for the head of the artichoke.

"Hæc modo purpureo ſurgit glomerata corymbo."

It is a Greek word (κορυμβος) from κορυς, a helmet, and that from καρα, the head.

CORYMBIFERÆ. The name of one of Ray's claſſes; andof the third ſubdiviſion in the order of compound flowers, in Linneus's natural arrangement.

COSTA-

Costatum *folium*. A ribbed leaf: as in *Echites syphilitica*.

Cottony. See *Tomentose*.

Cotyledon (κοτυλη, *a cavity*). The lobe, or placenta of the seed, destined to nourish the heart, and then to perish.—*Corpus laterale seminis, bibulum, caducum*. The lateral body of the seed, bibulous or imbibing moisture, and caducous or falling off quickly. Giseke defines it to be—*folium primum germinantis seminis*, but this is properly the seed-leaf.—In English we commonly call this part the *Cotyledon* or *seed-lobe*, when we speak of it as a portion of the seed, in a quiescent state—and the *seed-leaf*, when the seed is in a growing state.—The greater part of seeds have two lobes; some however have more —others only one, and others have none.— Hence a distinction of all plants into *Acotyledones, Monocotyledones, Dicotyledones, Polycotyledones*: which forms the basis of Jussieu's natural arrangement.

Cowled or *Cucullate* leaf (folium cucullatum). Wide at top, drawn to a point below, as in *Geranium cucullatum*: in shape of the paper rolled up conically by grocers for small parcels of spices, comfits, &c. "Vel thuris piperisque sis *cucullus*." Martial.

Hence,

Hence, from a ſimilitude in the form, this term was applied to the cowl, or large pendent cape of the upper garment, which turned up occaſionally to cover the head.

"Pullo Mævius alget in *cucullo*." Martial.

CREEPING root (*radix repens*). Extending itſelf horizontally, and putting forth fibres; as in *Mint*.—*Creeping ſtem* (caulis repens). Running along the ground, or up trees and other bodies, putting forth roots; as in *Ivy*, *Bignonia*, &c.

CRENATE or *notched* leaf (*folium crenatum*, from *crena*, a notch). *Cujus margo angulis neutram extremitatem reſpicientibus ſecatur.* Having the edge cut with angular or circular inciſures, not inclining towards either extremity: as in *Primula farinoſa*.—When the edge of a leaf is cut into ſegments of ſmall circles, inſtead of angular teeth, it is ſaid to be *obtuſely crenate;* when the larger ſegments have ſmaller ones upon them, a leaf is then ſaid to be *doubly crenate*, *duplicato-crenatum*.—Linneus's definition in *Philoſ. Bot.* takes in only the *acutely* crenate leaf; and therefore *inciſuris* is rightly ſubſtituted in *Delin. pl.* for *angulis*.

The ſame term is applied to the corolla, in

Linum, Dianthus chinensis, &c.—to the nectary, in *Narcissus triandrus*.

I think it, upon the whole, better to retain the Latin term, than to translate it by *notched*, which in our language does not take in the idea by which Linneus distinguishes *crenate* from *serrate*; namely, the direction of the teeth or notches. See *Serratum*.

When the edge of a leaf is cut into very small notches, Linneus uses the diminutive *Crenulate* (crenulatum). This term is also applied to the nectary in *Narcissus poeticus*.

CRESCENT-SHAPED (*lunātus*, from *luna*, the moon). Roundish, hollowed at the base, with posterior angles. *Subrotundum basi excavatum, angulis posticis notatum*.—Applied to leaves, and spikes: as in *Acrostichum pectinatum*.—The diminutive *lunulata* is applied to the keel of the flower in *Polygala myrtifolia*.—*Moon-shaped* is absurd, and *Mooned* is abominable. If the terms *lunate*, *lunulate* or *crescent-shaped* be objected to, we may use the periphrasis, *shaped like a crescent*, for any form of a leaf, &c. resembling the moon in any period of her first quarter; since this term does not occur very frequently.

CRESTED (*cristatus*). Having an appendage like a crest

a creſt or tuft: as the flower of *Polygala* and ſome anthers.

CRINITUS (*crinis*, hair). Hairy, or having long hair, or beards reſembling hair; as in *Phleum crinitum*.—Applied alſo to *Fronds*.

CRISPUM *folium*. A curled leaf. *Cum peripheria folii major evadit, quam diſcus admittit, ut undulatum fiat.* Philoſ. bot. p. 45.—*Cum foliorum peripheria augetur, ut circumcirca fluctuet quaſi undatus limbus.* p. 217.—*Margine luxuriante ut diſcus evadat longior ſua rachi.* Delin. pl.

CRISTATUS. See *Creſted*.

CROSSWISE (*cruciàtim*). This term is applied to leaflets in a whorl, when there are four of them forming a croſs—alſo to anthers; as in *Glecoma* and *Hippomane*.

Croſs-armed. See *Brachiate*.

CROWDED. See *Confertus*.

CROWN of the ſeed (*corona ſeminis*). An appendage to the top of many ſeeds, enabling them to diſperſe. This is either the calycle, as in *Scabioſa*, *Knautia*, *Ageratum*, *Arctotis*—or a Down (*Pappus*), as in *Hieracium*, *Sonchus*, *Crepis*, *Scorzonera*, *Tragopogon*, &c.

CRUCI-

CRUCIFORM or *cross-shaped* corolla (*cruciformis s. cruciata*). Consisting of four equal petals, spreading out in form of a cross. *Petalis quatuor æqualibus patens:* in Delin. pl. is added, *ungue quam lamina longiore*—the claw longer than the border. —These flowers constitute the fifth class in Tournefort's system; and are a principal character in the class *Tetradynamia* of Linneus. In the natural orders he has preferred the title of *Siliquosæ.*

CRYPTOGAMIA (κρυπτος and γαμος, *concealed nuptials*). The name of the twenty-fourth class in the Linnean artificial system, comprehending the vegetables whose fructification is concealed, or at least too minute to be observed by the naked eye.—It is divided into four orders. 1. *Filices* or Ferns. 2. *Musci* or Mosses. 3. *Algæ* or Flags. 4. *Fungi.*

CUBIT (*cubĭtus, cubitālis mensura*). A measure from the elbow to the extremity of the middle finger—seventeen Paris inches—a foot and a half English.

CUCULLATUM folium. *Lateribus ad basin conniventibus, apice vero dilatatis: ut in Geranio cucullato.* See *Cowled.*

CUCURBITACEÆ (*Cucurbita*, a Gourd). The forty-fifth order in Linneus's fragments of a natural method; and the thirty-fourth of his natural orders.

CULM (*Culmus*). The ſtalk or ſtem of Corn and Graſſes; uſually jointed and hollow; ſupporting both the leaves and fructification. *Truncus graminibus proprius, elevat folia fructificationemque, plerumque geniculatus, articulis inanibus.*—The word *ſtraw* being commonly appropriated to the dry ſtalk of corn, I prefer uſing the Latin *culm*.

CULMINIÆ (*Culmen*, the top). The twenty-ſixth order in Linneus's fragments of a natural method.

CUNEIFORME *folium*. A cuneiform, or wedge-ſhaped leaf. *Cujus diameter longitudinalis ſuperat tranſverſalem, & ſenſim deorſum anguſtatur.* See *Wedge-ſhaped*.

CURLED leaf (*folium criſpum*). When the periphery is larger than the diſk admits, and ſo becomes waved—or, is ſo luxuriant, that the diſk is longer than the rib of the leaf: as in *Curled Parſley*.—All curled leaves are monſters, or productions of art.

Curled nectary (nectarium crispum): as in *Narcissus Pseudonarcissus* and *minor*—which have their cups waved or curled about the edge.

Curved, bowed, or bent inwards (*incurvus*). Applied to Legumes and Prickles.—*Caulis incurvatus, introrsum nutans.* A stem curved or nodding inwards.

Curved, or *bowed outwards, backwards* or *downwards* (recurvus, recurvatus). Applied to Leaves and Prickles.

Cuspidatum *folium* (*cuspis*, the point of a sword or spear). A *cuspidate* leaf. Having the end sharp, like the point of a spear—or, terminating in a bristly point. *Terminatum apice setaceo rigidiusculo.*

Cyathiformis (*cyathus*, a drinking-cup or glass). *Cum ex cylindro superne parum dilatatus est.* Cyathiform, or Cup-shaped. Cylindric, only widening a little at the top.—Applied to the calyx in *Mauritia*—to the corolla—and to *Periza Acetabulum* and *cyathoides*.

Cylindrical. Applied to stems, and some leaves, which are round (*teretes*), that is without angles; but many times longer than they are thick.

thick. This is more properly expressed by *columnar*, because they are not of the same diameter from top to bottom. The same term is applied to the calyx; as in *Euphrasia*, *Dianthus chinensis*, &c.—to the style—and to the spike.

CYMBIFORMIS. See *Boat-shaped*.

CYME or CYMA (Κυμα, *fœtus*). It signifies properly a sprout or tender shoot, particularly of the cabbage.—Linneus explains it to be; an aggregate flower composed of several florets sitting on a receptacle, producing all the primary peduncles from the same point, but having the partial peduncles scattered or irregular; all fastigiate, or forming a flat surface at top. As in *Opulus*, *Cornus sanguinea*, *Ophiorhiza*.—*Flos aggregatus ex flosculis pluribus insidentibus receptaculo, in pedunculos fastigiatos, primores ex eodem puncto productos, posteriores autem sparsos.* Philos. bot. p. 78.—*Receptaculum ex centro eodem universali, partialibus vero vagis, elongatum in pedunculos fastigiatos.* p. 55. *Umbella composita ramulis alternis.* Regn. veg. The Cyme is either *naked*, or with *bractes*.

Flowers disposed in a Cyme are called *Cymose* flowers.—Hence

CYMOSÆ. The sixty-third of Linneus's natural orders in *Philosophia Botanica*.

D

DÆDALEUM *folium.* A Dædal leaf.—*Una flexuosum lacerumque.*—At the same time flexuose and lacerated; or winding and torn.

DAGGER-POINTED, *Daggered* or *Mucronate;* ending in a point like that of a dagger.—Applied to the leaf of *Bromelia Ananas:* and to the calyx.

DECAGYNIA (*δεκα, ten,* and *γυνη, a woman or wife*). Ten-styled. The name of one of the orders in Linneus's artificial system; comprehending those flowers which have ten styles. This occurs only in the class *Decandria.*

DECANDRIA (*δεκα, ten,* and *ανηρ, a man or husband*). Ten-stamened. The name of the tenth class in Linneus's artificial system; comprehending all hermaphrodite flowers with ten stamens.—It is also the name of an order in the classes *Monadelphia, Diadelphia, Gynandria,* and *Dioecia.*

DECAPHYLLUS calyx. A decaphyllous or ten-leaved calyx; as in *Hibiscus.*

DECEMFIDUS calyx. Cut into ten parts. A ten-cleft calyx, or rather perianth. As in *Potentilla* and *Fragaria*. See *Cleft*.

DECEMLOCULARE *pericarpium*. A ten-celled pericarp or feed-veffel: as in *Linum*.

DECIDUOUS (*deciduus*). Leaf: falling off in the autumn. *Deciduum folium: peracta unica æftate cafurum.*—Calyx or perianth: falling after the corolla opens. *Deciduum perianthium: poft floris explicationem cadens.* As in *Berberis*, and the clafs *Tetradynamia.*—Corolla or petals: falling off with the reft of the flower. *Decidua corolla: cum floris cafu.*—Applied alfo to ftipules; as in *Padus*, *Cerafus*, *Populus*, *Tilia*, *Ulmus*, *Quercus*, and many other trees—Bractes—and Legumes. See *Caducous*.

DECLINATUS *caulis*. A declined or declining ftem. *Arcuatim defcendens.* Defcending archwife. The leaft degree of curvature towards the earth. Oppofed to afcending.—Applied alfo to the Peduncle—Stamen—and Style.—*Declinatum folium.* A declined or declining leaf. *Deorfum flexum inftar carinæ naviculæ.* Bent downwards like the keel of a fhip.

DECOMPOUND *leaf*. *Folium decompofitum.* When the

the primary petiole is so divided that each part forms a compound leaf.—The different kinds of the decompound leaf are—*Bigeminate*, *Biternate* and *Bipinnate*: which see in their proper places.—Applied sometimes to an umbel (umbella decomposita), which is otherwise called Proliferous.—Flower (decompositus flos): compounded of compound flowers, or containing within a common calyx smaller calyxes, common to several flowers; as in *Sphæranthus*, &c. contained in the order *Segregata* of the class *Syngenesia*.

DECUMBENT flower. *Decumbens flos.* Having the stamens and pistils declined or bending down to the lower side of it: as in *Cassia*—Stem: *caulis decumbens*, lying on the ground with the base higher than the other parts.

DECURRENT leaf. *Folium decurrens.* A sessile leaf having its base extending downwards along the stem. As in *Symphytum*, *Verbesina*, *Carduus*, *Sphæranthus*.—Applied also to the petiole, and the stipule.

DECURSIVELY-PINNATE leaf. *Folium decursive pinnatum.* Having the leaflets decurrent, or running along the petiole.

Decussated leaves and branches. *Decussata folia. Decussati rami.* Growing in pairs, which alternately cross each other at right angles; so that if the stem be viewed vertically, or the eye be directed right down it, the leaves or branches will appear to be in fours.

Deflexus ramus. A *deflected* branch. *In arcum deorsum inclinatus.* Delin. pl. Bowed or bending down archwise.

Defoliatio. Defoliation, or shedding the leaves. —*Tempus autumnale, quo arbores folia dejiciunt, eoque indicant progressum autumni & insequentis hyemis.*—Here Linneus puts it, not for the action of unleafing, or shedding leaves; but for the season in which this action is performed.—So

Dehiscentia, the gaping or opening of capsules, is also put for the season in which this usually happens.

Deltoid leaf. *Folium deltoïdes, or deltoideum.*—*Rhombeum ex quatuor angulis, e quibus laterales minus a basi distant quam reliqui.*—Shaped like a rhomb, having four angles, of which the lateral ones are less distant from the base than the others.

I must confess that I do not understand this descrip-

defcription: for of the two remaining angles (*reliqui*) one is at the bafe of the leaf; and the lateral angles cannot be at a lefs diftance from the bafe than the bafe itfelf is. Nor will the figure of a deltoid leaf given at n. 58. in *Philofophia Botanica* at all affift us; for that is by no means a plane leaf, but one of the fucculent kind, fuch as we find in the genus *Aloe*, *Mefembryanthemum*, &c. and yet it has no refemblance to thofe of *M. deltoides*.

I either miftake Linneus's meaning, or we muft admit of fome alteration in the terms of his defcription. If inftead of *reliqui* we read *reliquus*; then the fenfe of the words will be—that *the lateral angles are nearer to the bafe, than the apex is to the fame bafe*. This is true, but not fufficiently defcriptive of a deltoid leaf.—If for *reliqui* we read *a reliquo*; then the meaning will be—that *the lateral angles are at a lefs diftance from the bafe than they are from the apex*; and therefore the lower fides of the rhomb, connecting the lateral angles with the bafe or point of infertion of the petiole, muft be fhorter than the upper fides, connecting the fame lateral angles with the apex of the leaf, or angle oppofite to the petiole. This fenfe agrees fufficiently with the form of thofe leaves which are given as inftances of the deltoid leaf.—

leaf.—But I own it would give me more satisfaction if we might be permitted for *basi* to substitute *se invicem*. Then the full meaning of the definition would be this—*a Deltoid leaf has the general appearance of a delta or triangle, but in reality it approaches in figure to a rhomb, and like that has four angles, of which the two side ones are always nearer to each other than the two others at the base and apex; so that the length of the leaf is somewhat greater than the breadth.*—All this will best be understood by examining a leaf of the common *Black Poplar*, which is given as one instance of a deltoid leaf in Linneus's specific characters. Other instances are, several species of *Chenopodium* and *Atriplex*: *Cochlearia danica*: *Alyssum sinuatum* and *deltoideum*.—If it should be objected, that a leaf cannot have the form both of a delta and a rhomb; I reply, that Linneus affirms no more than that this leaf has the appearance of a delta, with a resemblance to a rhomb; and that it would be absurd to expect mathematical exactness in substances so various in their forms as leaves.

With respect to *Mesembryanthemum deltoides*, there is no doubt but that it was so named, because each side of its succulent leaves is in form of a triangle, and therefore corresponds with the figure of the Greek letter *delta*.

Demersum *folium*. A *demerse* leaf. Growing below the furface of the water. Frequent in aquatic plants. The fame with *Submerfum*.

Dense panicle. *Denfa panicula*. Having abundance of flowers very clofe. A greater degree of *congefta*, heaped.

Dentata (*Dens*, a tooth) *radix*. A *toothed* root. *Moniliformis, ex articulis concatenatis*. Confifting of a concatenation of joints, refembling a necklace.

Dentatum folium. A *toothed* leaf. *Quod acumina horizontalia, folii confiftentia, fpatio remota habet*. Having horizontal points, of the fame confiftence with the leaf, with a fpace between each.—Dr. Berkenhout obferves, that if, inftead of horizontal, Linneus had written, *in the plane of the difk*, it would have been more intelligible.—In *Delin. pl.* it is—*margine acuminibus patentibus remotis*, having fpreading points [or teeth], remote from each other, about the edge.—Exemplified in *Leontodon haftile, autumnale, alpinum, hifpidum, hirtum*. *Primula veris* & *minima*. *Epilobium montanum*.

Dentato-finuatum. Toothed, and at the fame time with finufes, bays or large hollows about the edge. *Tooth-finuate*.

This

This term is applied alſo to the ſtipule—*Stipula dentata.*

DENTICULATUS (*denticŭlus*, dimin. from *dens*). *Toothletted*, having ſmall teeth or notches. Applied to the leaf; as in *Heſperis matronalis, Leontodon Taraxacum, Epilobium tetragonum.*—To the calyx—and to the ſeed; as in *Bidens.*

DENUDATÆ (*denūdor*, to be ſtripped naked). The ſeventh of the natural orders, in Linneus's *Philoſ. botan.* comprehending a few genera which have flowers that appear at a different time from the leaves, and therefore have a naked appearance; as *Colchicum.*

DEPENDENS folium. A leaf hanging down; or, pointing directly to the ground. *Quod recta terram ſpectat.*—Applied alſo to the ſleep of plants (dependens ſomnus); when the leaves, which are erect in the day, hang down at night.

DEPRESSUM folium. A depreſſed leaf.—*Quod in diſco magis deprimitur quam ad latera.* Hollow in the middle; or, having the diſk more depreſſed than the ſides. This term has reference to ſucculent leaves only; and is oppoſed

to *Convex*, in Philof. bot. and to *Compreffed*, in Delin. pl.

Applied alfo to feeds; as in *Cynogloffum*.

Dextra torfio, and *dextrorfum volubilis*. See *Torfio* and *Twining*.

Diadelphia (from δις, *twice*, and αδελφος, *a brother*). *Two brotherhoods*. The name of the feventeenth clafs, in Linneus's artificial fyftem; comprehending thofe plants which bear hermaphrodite flowers, with two fets of united ftamens.— This is a natural clafs, with papilionaceous or pea flowers, and leguminous fruits. It is nearly the fame with the *Papilionacei* of Tournefort; the *Irregulares Tetrapetalæ* of Rivinus, and the *Leguminofæ* of Ray. The orders are founded on the number of the ftamens; and ten being the predominating number in this clafs, the order *Decandria* is much the largeft. The regular difpofition of the ftamens in this order is, nine united in one brotherhood, the lower broad part of the filament fheathing the germ; and the tenth fingle; but in almoft twenty genera the ten ftamens are connected into one body at bottom.

Diadelphous ftamens. *Stamina diadelpha*. Sta-

mens forming two brotherhoods. The filaments united in each of the two ſets at bottom, but ſeparate at top.

Diagnosis *plantæ, conſiſtit in affinitate generis, & in diſcrimine ſpeciei.*—The diagnoſis of a plant, conſiſts in the affinity of the genus, and the difference or diſtinction of the ſpecies. The ſpecific characters in the *Species plantarum, Syſtema vegetabilium*, and other works of Linneus, are true diagnoſes.

Diandria (δις, and ανηρ, *a husband*). The ſecond claſs of Linneus's artificial ſyſtem, comprehending all hermaphrodite flowers, which have two ſtamens.—Alſo the name of an order, in claſſes *Gynandria, Monoecia, Dioecia.*

Haller calls ſuch plants *Diſtemones.*

Dichotomous ſtem. *Caulis dichotomus* (διχα and τεμνω, *to divide by pairs*). Continually and regularly dividing by pairs from top to bottom. As in *Viſcum* or *Miſſelto, Valeriana Locuſta.* I prefer angliciſing the Latin term, to tranſlating it by *forked;* becauſe this gives the idea of a ſingle diviſion only.

When applied to a peduncle, as in *Meliſſa Calamintha*, this term may with more propriety

5 be

be rendered by *forked*; becaufe it feldom proceeds to a fecond fubdivifion.

Dichotomous-corymbed. Compofed of corymbs, in which the pedicles divide and fubdivide in pairs. As in *Achyranthes corymbofa*, which is diftinguifhed by having—*panicula dichotomo-corymbofa*.

Dicoccous or *two-grained* capfule (*capfula dicocca*). Confifting of two cohering grains or cells, with one feed in each.

Dicotyledones. Thofe plants which have feeds that fplit into two lobes in germinating.

Didyma (διδυμος, *twin*) *anthera, capfula, bacca.* —*duobus nodis extus protuberantes.*—Didyma capfula, bacca, eadem ac dicocca effe videtur. See *Twin*.

Didynamia (δις *twice*, and δυναμις *power*). The name of the fourteenth clafs in Linneus's artificial fyftem, comprehending thofe plants which have hermaphrodite flowers, with four ftamens in two pairs of different lengths; the outer pair longer, the middle pair fhorter and converging. Thefe flowers have one piftil; and the corolla is irregular—either *ringent* or *perfonate*.

It

It is a natural claſs, containing the *Labiati* and *Perſonati* of Tournefort, and the *Monopetali irregulares* of Rivinus.

Linneus has divided it into two orders: 1. *Gymnoſpermia*, or ſuch as have naked ſeeds. 2. *Angioſpermia*; ſuch as have the ſeeds incloſed in a veſſel.

DIFFORMIS flos of Jungius and Knaut—*Anomalus* of Tournefort—*Irregularis* of Rivinus.—Linneus adopts the latter term. A difform, anomalous, or irregular flower, or corolla.—*Partibus nec magnitudine nec proportione partium ſibi reſpondentibus.* The parts of which do not correſpond either in ſize or proportion.

Difformis torſio. The twiſting of a ſtem one way and then another. See *Twining.*

Difformia folia. Difform leaves. *Diverſæ figuræ in eadem planta.* Of different ſhapes on the ſame plant. As in *Ranunculus aquatilis, Rudbeckia triloba, Euphorbia heterophylla, Lepidium perfoliatum, Hibiſcus virginicus, pentacarpos, Sabdariffa.*

It is obſervable, that Aquatic plants ſometimes have the leaves under water finely cut, whilſt thoſe above water are not ſo. On the contrary,

contrary, in mountain plants, the upper leaves are uſually moſt cut.

DIFFUSED ſtem. *Caulis diffuſus.* Having ſpreading branches—*ramis patentibus;* as *Teucrium Scordium.*—Panicle. *Diffuſa panicula,* hanging looſe: oppoſed to *coarctata* cloſe or compact. *Cum laxe divaricantur pedicelli, angulis rectis ſive obtuſis.* When the pedicels are ſpread about looſely, at right or obtuſe angles with the main peduncle.

DIGITATE leaf. *Folium digitatum.* (Fingered leaf. *Lichf. Soc.*) When a ſimple or undivided petiole connects ſeveral diſtinct leaflets at the end of it. *Cum petiolus ſimplex apice adnectit foliola plura.* This is a ſort of Compound leaf; whereas the *Palmate,* which in ſome meaſure reſembles it, is a ſimple leaf. The digitate leaf, to correſpond with the name, ſhould have five leaflets ſpreading out like the open fingers: but Linneus makes *binate, ternate* and *quinate* leaves to be ſpecies of the digitate; and the leaves of Horſe-cheſnut, though they have more leaflets than five, are nevertheleſs called digitate.

DIGYNIA (δὶς, and γυνὴ). The name of an order in Linneus's artificial ſyſtem, comprehending thoſe plants which have two piſtils to a flower.

G This

This order is the ſecond in the firſt thirteen claſſes, except the ninth.

DIMIDIATUS. See *Halved.*—Dimidiata Spatha, *latere tantum interiore fructificationem obveſtiens.*—Dimidiatum Capitulum, *ab altero latere rotundum, ab altero planum.*—Dimidiatum involucrum, ſ. involucellum, *extrorſum ſitum, eſtque patens vel dependens :* ut in Æthuſa.

DIOICA (δὶς and οικος, *a houſe) planta.* A *dioecous* plant. Having male and female flowers on diſtinct individuals. Hence

DIOECIA. The name of the twenty-ſecond claſs in Linneus's artificial ſyſtem, comprehending thoſe plants which have no hermaphrodite flowers; but male and female flowers on diſtinct individuals.—*Mares & fœminæ habitant in diverſis thalamis & domiciliis.*

DIPETALOUS *(dipetăla)* corolla, or two-petalled; having two petals only : as *Circæa, Commelina.*

DIPHYLLOUS (δὶς, and φυλλον, *a leaf)* or *two-leaved* calyx : as in *Papaver* and *Fumaria.*—Applied alſo to the *cirrus* or tendril, as in *Lathyrus*—and to the peduncle, as in *Gomphrena.*

DISK of a leaf. The whole ſurface—*ſupinus*, the

upper—*pronus*, the under ſurface.—*Diſk* of a flower, is the central part in radiate compound flowers, conſiſting generally of regular corollules or florets: it is applied to other aggregate flowers, when the florets towards the middle differ from thoſe in the circumference; as in umbels.

DISPERMUS fructus, *qui duo tantum ſemina continet.* A *diſpermous* or *two-ſeeded* fruit; containing two ſeeds only; as in *umbellate* and *ſtellate* plants.

DISSECTUM folium. A *gaſhed* leaf (diſſected is not proper).—In Philoſ. Bot. p. 219. Linneus gives *inciſum* ſ. *diſſectum* as a ſuperſeded term, and refers to *Laciniatum*, which he thus explains, in p. 43.—*varie ſectum in partes, partibus itidem indeterminate ſubdiviſis.* See *Gaſhed* and *Laciniate.*

In Delin. pl. the *Gaſhed* leaf is diſtinguiſhed from the *Laciniate*, by the ſections being *determinate* in the firſt, and *indeterminate* in the ſecond.—*Diſſecta* ſ. *inciſa* [folia] *ſectiones continentia plerumque numero determinatas.*

DISSEPIMENTUM. *Paries quo fructus interne diſtinguitur in concamerationes plures.* See *Partition.*

DISSILIENS pericarpium. A diſſilient, burſting

 or

or elaſtic pericarp or fruit. Burſting open with a ſpring; as in *Hura*, *Dentaria*, *Cardamine*, *Momordica Elaterium*.

DISTANS ſ. *remōtus* verticillus, *pedunculis remotis*. A diſtant whorl; when the flowers which compoſe it, being few in number, are remote from each other.

Applied alſo to ſtamens (*ſtamina diſtantia*), as in *Mint*.

DISTICHUS (δὶς and ϛίχος, *row* or *rank*). Two-ranked.—*Diſtichus caulis: ramos ſitu horizontali, nec decuſſatim ſitos exſerens*.—A diſtich or two-ranked ſtem or ſtalk: putting forth branches, not decuſſated, but in a horizontal poſition.—*Diſticha folia: duo latera rami tantum reſpicientia, licet undique inſerta*.—Reſpecting two ſides of the branch only, though inſerted on all parts of it: as in *Fir* and *Diervilla*. Or, pointing two ways only, though not in the ſame plane.

This term is applied in the ſame ſenſe to a ſpike (*ſpica diſticha*); *floribus ad utrumque latus ſpectantibus*: all the flowers pointing two ways. Oppoſed to *Secunda*.—*Spica tetraſticha*, a four-ranked ſpike—*hexaſticha*, a ſix-ranked ſpike.

DISTINCT leaves. *Folia diſtincta*. Quite ſeparate from each other. Contraſted with *connate*:

as in feveral of the *Mefembryanthema.*—*Foliola diftincta.* Diftinct leaflets, as in *Jafminum officinale*; contrafted with *confluent*, as in *J. grandiflorum.*—*Antheræ diftinctæ.* Diftinct or feparate anthers, as in moft flowers; contrafted with *connate*.

Divaricate (Straddling. *With.*). Standing out wide. *Divaricati rami: a trunco ad angulum obtufum difcedentes.* Divaricate branches; making an obtufe angle with the ftem. Oppofed to *Coarctati.* Philof. bot. p. 233.—*Divaricata panicula*: a divaricate panicle; when the pedicels form an obtufe angle with the main peduncle.—Applied in the fame fenfe to *peduncles* and *petioles*.

Diverging branches. *Divergentes rami.* Making a right angle with the ftem. *A trunco ad angulum rectum difcedentes.*—Applied alfo to the fleep of plants. *Divergens fomnus*: when the leaflets, in their ftate of repofe, approach each other at the bafe, but fpread out at the tips.

Dodecandria (δώδεκα, *twelve*, and ἀνὴρ, *a hufband*). Twelve-ftamened. The name of the eleventh clafs in Linneus's artificial fyftem; comprehending all thofe plants, which have

hermaphrodite flowers with from twelve to nineteen ſtamens incluſive.

Dodrans ſ. *dodrantalis menſura.* The ſpace between the end of the thumb and of the little finger, both extended. About nine Paris inches. This meaſure may be called in Engliſh the *long ſpan*, and *ſpithama* the ſhort ſpan. See *Meaſures.*

Dolabriforme folium (Dolabra, *an axe*, a dolando). A *dolabriform, axe* or *hatchet-ſhaped* leaf. *Compreſſum, ſubrotundum, obtuſum, extrorſum gibbum acie acuta, inferne teretiuſculum.* Compreſſed, roundiſh, obtuſe, gibbous on the outſide with a ſharp edge, roundiſh below. As in *Meſembryanthemum dolabriforme.*

Dorsal awn. *Dorſalis ariſta.* Fixed to the back or outer ſide of the glume, not ſpringing from the end: as in *Bromus* and *Avena.*—*Lateri exteriori glumæ impoſita.*

Dotted leaf. *Folium punctatum.* Beſprinkled with hollow dots or points. *Quod punctis excavatis adſperſum eſt.* As in *Anthemis maritima.* Applied alſo to the receptacle; as in *Leontodon, Cacalia, Ethulia, Xeranthemum, Chryſanthemum, Othonna.*

DOUBLE. Geminus.—*Double leaves.* Two connected by one petiole.—*Double ſtipules.* Two and two by pairs.—*Double peduncle.* Two from the ſame point. Different from *Two-flowered*, which ſee.

Doubly-crenate leaf. *Duplicato-crenatum folium.*—Having ſmall notches on the larger.

Doubly-pinnate. See *Bipinnate.*

Doubly-ſerrate. *Duplicato-ſerratum.* Having ſmall teeth on the larger.

Doubly-ternate. See *Biternate.*

DOWN is properly the Engliſh term for ſome ſorts of pubeſcence; but it is uſed alſo for the *Pappus* or little crown, fixed on the top of ſome ſeeds, by which they fly: as *Dandelion*, *Thiſtle*, &c. This is 1. feathered or plumoſe—or elſe 2. capillary, hairy or ſimple. *Corona pennacea, piloſave volitans.* Some of theſe crowns are ſtiped, others ſeſſile.—*Down* ought not to be uſed in both ſenſes. *Pappus* cannot well make an Engliſh word. *Feather* is not proper, for we cannot ſay—a *feathered* feather, and a *hairy* feather.

Downy leaf. See *Tomentoſus.*

DROOPING (cernuus). The top or end pointing to the ground. Applied to the peduncle or flower; as in *Bidens cernua.*—Different from nodding, *nutans*; which fee.

DRUPA. *Pericarpium farctum evalve, nucem continens.* A *Drupe* is a pulpy pericarp or fruit without valves, containing a nut or ftone with a kernel. As *Plum*, *Apricot*, *Peach*, *Almond*, *Olive*, &c. Some call this fort of fruit *Prunus* or *Plum*. It is ufually a moift fucculent fruit; but fometimes dry, as the *Almond*.

DRUPACEÆ. The thirty-eighth order in Linneus's fragments of a natural method: containing thofe trees which bear a drupe or plum.

DUMOSÆ (*dumus*, a bufh). The nineteenth order in Linneus's fragments, in *Philof. Bot.*; and the forty-third of the natural orders in *Gen. pl.*

DUPLICATO-CRENATUM. *Doubly-crenate.*

DUPLICATO-PINNATUM. *Doubly-pinnate* or *Bipinnate.*

DUPLICATO-SERRATUM. *Doubly-ferrate.*

DUPLICATO-TERNATUM. *Doubly-ternate*, or *Biternate.*

Duration of plants. The continuance of their life or exiſtence.—As *Cadūcous* or quickly periſhing. *Ephemĕral*, creatures of a day. *Annual*, *Biennial*, *Perennial*.

E

Eared. *Aurītus*, *Auriculātus* (*auris*, an ear). Having an appendage like a little ear. Exemplified in the *leaf*—*leaflet*—and *frond*.—Aurita folia: *cordata ceterum, ſed angulis prominentibus rotundatis*. Eared leaves, are cordate or heart-ſhaped, but have the corners prominent and rounded. *Delin. pl.*—Auriculata folia: *lobo laterali minore prope baſin aucta*. Jungermannia, *Leers nomencl.*—with the addition of a ſmaller lateral lobe near the baſe.—Auriculatum foliolum: twiſted into the form of a little ear, as in Jungermannia ciliaris. *Berkenh.*—We have inſtances of Eared Fronds in *Acroſtichum punctatum*. *Polypodium Pica*, *marginale*.

The diminutives *Earlet* and *Earletted* ſeem ſcarcely neceſſary.

Ebrac-

Ebracteatus *racemus, pedunculus.* A raceme or peduncle without any bracte or floral leaf; as in *Cistus guttatus.*

Ecalcarata corolla. A corolla without any spur, or spur-shaped nectary. As in *Wolfenia.*

Echinatum *pericarpium.* An echinated pericarp. Beset with prickles like a hedgehog (εχινος). As in *Datura Stramonium.*—Prickly is the proper translation of *aculeatus.*

Efflorescentia. Flowering season.—The time of the month, in which different sorts of plants first shew their flowers.

Egg-shaped (Ovatus). See Ovate.—I cannot approve of *Egged.*

Eglandulosus *petiolus.* A petiole without glands.

Eight-petalled corolla; or consisting of eight distinct petals. *Octopetăla corolla:* as in *Mimusops.*—When it is only deeply divided into eight parts, it is said to be *eight-cleft,* or *octofid:* (corolla octofida) as in *Fuchsia* and *Chlora.*—We have an example of an *eight-cleft* calyx (calyx octofidus) in *Tormentilla.*

Elastic *pericarp.* Throwing open, or casting

off

off its valves with a ſpring. Not different from *Diſſiliens*, which ſee.

Elliptic leaf. *Folium ellipticum.* Lanceolate, but with the breadth of an ovate leaf. *Lanceolatum latitudine ovati folii.* Delin. pl. — In Philoſ. bot. it is made ſynonymous with *ovale.* — Both the elliptic and oval leaf are in the form of an ellipſe; and it appears to me that the former differs from the latter only in being more oblong: and yet broader than the lanceolate leaf.

Emarginate. *Emarginàtum.* Notched at the end. End-nicked, *Lichf. ſoc.* Applied to the leaf—to the corolla, as in *Agroſtemma coronaria*, &c.—and to the ſtigma: as in the claſs *Didynamia.*—*Quod terminatur crena.*

Embracing or ſtem-claſping leaf. *Folium amplexicaule.*

End-bitten. *Præmorſus.*

End-nicked. See *Emarginate.*

Enervium ſ. *enerve folium.* A nerveleſs leaf. Having no apparent nerves. Oppoſed to *nervoſum.*

Enneandria (*εννεα, nine,* and *ανηρ, a huſband*). Nine-ſtamened. The name of the ninth claſs

in

in the artificial ſyſtem of Linneus; comprehending ſuch plants as bear hermaphrodite flowers with nine ſtamens.—Alſo of an order in the claſſes *Monadelphia*, and *Diœcia*.

Enneapetala corolla. A nine-petalled corolla: or, a flower of nine petals: as in *Thea viridis*, *Magnolia*, and *Liriodendron*.

Enodis. Knotleſs. Without knots or joints. In oppoſition to *nodoſus* knotted.—Enodis culmus: *qui continuus eſt, nec articulis interceptus.*—As in *Schoenus*, *Cyperus*, *Scirpus*.—*Nodum in Scirpo quærere*, is proverbial.

Ensatæ (*enſis*, a ſword). The fifth order in Linneus's fragments, and the ſixth in the natural orders at the end of *Gen. pl.* Containing ſome of the Liliaceous plants, which have ſword-ſhaped leaves.

Ensiform leaf (*folium enſiforme*). Sword-ſhaped, or ſword-form.—Ancipital or two-edged, tapering from the baſe towards the point. As in ſome ſpecies of *Ixia*, *Gladiolus*, *Iris*, &c.—*Anceps, a baſi verſus apicem attenuatum.*

Entire. *Integer.*—Stem: quite ſingle with ſcarce any branches. *Simpliciſſimus, ramis vix ullis.* Philoſ. bot.—In Delin. pl. it is explained to be,

Simpli-

Simpliciſſimus, ramis anguſtatis; and ſimpliciſſimus is *ramis vix ullis*; whereas ſimplex is defined to be, *continua ſerie verſus apicem extenſus*: that is, the *ſimple* ſtem has no branches, and the *moſt* ſimple ſtem has few—which ſeems ſtrange.

An entire leaf. *Integrum folium.*—Undivided, without any ſinus or opening in the edge. *Indiviſum, ſinu omni deſtitutum.*

An entire perianth. *Integrum perianthium.* Oppoſed to *fiſſum*, cloven. As in *Genipa.*

Sometimes the ſuperlative degree is uſed, and muſt be rendered—*quite, very* or *abſolutely* entire.—Integerrimum folium: *ipſo margine lineari, nec minimum ſecto.* With a linear edge, not in the leaſt cut or divided. As in *Rhamnus Frangula, Trientalis europæa.*—It is applied alſo to the *Stipula.*

Epidermis. The outer dry and very thin coat or covering of a plant; correſponding with the ſcarf ſkin.—*Tunica exterior plantæ ſicca tenuiſſima.*

Equal. A calyx or corolla is ſaid to be equal (*æqualis*), when the parts are of the ſame ſize and figure. In *Utricularia*, the calyx is equal; in *Primula, Limoſella,* &c. the corolla is equal.

Equal

Equal Polygamy. See *Æqualis.*

Equinoctial flowers. Opening at a regular stated hour. See *Vigiliæ.*

Equitantia *folia.* Equitant leaves; riding as it were over each other. *Quum folii latera parallele connivent, ut interiora ab exterioribus includantur; quod non in conduplicatis obtinet.* Philos. bot.—When the sides of a leaf converge in parallel lines, so that the inner leaves are inclosed by the outer ones; which is not the case in conduplicate leaves.—It is a term used in foliation or leafing. In *Delin. pl.* it is called *equitans vernatio*, and is thus explained—*marginibus conniventia folia situ opposito, ut alterum includat alterum.* When two opposite leaves converge so to each other with their edges, as that one incloses the other.—As in *Iris*, *Hemerocallis*, *Acorus*, *Carex*, *Gramina.*

Erect or *Upright.* Erectus.—When applied to a stem or branch, it is not taken strictly, but is so called, when it approaches to a perpendicular with the ground—*fere ad perpendiculum se attollens.* When a stem or branch is entirely perpendicular without any bending, the word *strictus* is used.—In *Philos. botan. Erectus* is opposed to *volubilis*; and must therefore be understood

derſtood to mean a ſtem ſtanding of itſelf without ſupport, in oppoſition to *twining*.

A leaf is ſaid to be *erect*, when it makes ſo very acute an angle with the ſtem as to be cloſe to it—*quod ad angulum acutiſſimum cauli adſidet.*—When it makes an acute angle with the ſtem, it is ſaid to be *patens*, ſpreading.

An *erect flower* has its aperture directed upwards: as in *Trillium ſeſſile.* Oppoſed to *nutans*, nodding.

An *erect anther*, fixed by one end to the top of the filament; contraſted with *verſatilis* and *incumbens* which are fixed by the ſide.

This term is applied alſo to the *petiole*, *peduncle*, and *ſtipule*.

The dimin. *erectiuſcula* is ſometimes uſed for *ſomewhat* or *nearly upright*; and is applied to the capſule of *Hellebore*. The diſtinction ſeems hardly neceſſary, ſince the term erect or upright is taken ſo looſely.

Erosum *folium*. An Eroſe or gnawed leaf. When a ſinuate leaf has other very ſmall obtuſe ſinuſes on its edge.—*Cum folium ſinuatum margine ſinus alios minimos obtuſos acquirit.*—It has the appearance of being gnawed or eaten by inſects.

Essential *Character* of Vegetables. *Character Eſſentialis.* A ſingle or peculiar natural

 mark,

mark, diſtinguiſhing one genus from all others in the ſame natural order. Innumerable inſtances of ſuch occur in Linneus's Syſtema Vegetabilium.

EVERGREEN. *Sempervirens.* Flouriſhing through all ſeaſons of the year.

EXARATUS. Scored.

EXASPERATUS. Roughened.

EXPANSUS. Expanded, ſpread out: as the calyx in *Helianthus.*—*Patens*, and the dimin. *Patulus* are better expreſſed by *Spreading*—which ſee.

EXPLANATUS. Unfolded, or ſpread out flat: as the lip of the corolla in *Antirrhinum canadenſe.*

EXSERTA (from *exsĕro*, to put forth) *ſtamina; exſertæ antheræ.* Protruded ſtamens or anthers. Standing out of the corolla, or appearing above it; as in ſome ſpecies of *Erica.* Oppoſed to *incluſa*, ſhut in, or incloſed within the corolla.

EXSTIPULATUS. Without ſtipules. As in many ſorts of *Ciſtus*, *Cardamine parviflora*, &c.

EXSUCCUS. Juiceleſs, without juice; oppoſed to ſucculent. It reſpects the ſubſtance of leaves.

EXTRA-

EXTRAFOLIACEÆ *ſtipulæ*. Extrafoliaceous ſtipules. Growing on the outſide of the leaves, or below them.—*Infra folium collocatæ*. As in *Betula*, *Tilia*, and the claſs *Diadelphia*. Oppoſed to *intrafoliaceæ*.—It is applied alſo to *peduncles*, and *prickles*.

EYE of a ſeed. *Hilum*—which ſee.

F

FACTITIOUS or *Artificial* Character.—*Character factitius*. A mark or marks diſtinguiſhing one genus from another in an artificial arrangement: which is done by Ray and others in ſynoptical tables.

FAMILIES of Vegetables. Linneus (Philoſ. bot.) divides the vegetable world into ſeven families. 1. Fungi. 2. Algæ. 3. Muſci, or Moſſes. 4. Filices, or Ferns. 5. Gramina, or Graſſes. 6. Palmæ, or Palms. 7. Plantæ, or Plants; including all that are not in the foregoing families. See *Gentes*.

M. Adanſon publiſhed a ſyſtem, under the title of *Familles des Plantes*. And the Lich-

 field

field Society have given their tranflation of Linneus's Genera Plantarum the fame title, in Englifh.

FARCTUS (*farcio*, to ftuff or cram). Stuffed, crammed, or full; without any vacuities.—*Farctum folium*; a ftuffed leaf, full of pith or pulp; in oppofition to *tubulofum* and *fiftulofum*, tubular or hollow like a pipe.—It is applied alfo to the *ftem* and *pericarp*.

FASCICLE, (*fafciculus*, dimin. from *fafcis*) a bundle. A fpecies of inflorefcence, or manner of flowering, in which feveral upright, parallel, faftigiate, approximating flowers are collected together: as in *Dianthus barbatus*.—*Colligit flores erectos, parallelos, faftigiatos, approximatos*. Hence

Fafciculāris radix: a fafcicular or fafcicled root. A fpecies of the tuberous, with the knobs collected in bundles, as in *Pæonia*.

Fafciculāta folia: fafcicled leaves. Growing in bundles or bunches from the fame point, as in *Larix*.

FASTIGIATUS (*faftigium*, the pointed top, or roof of a building).—Caulis: *ramis æqualis altitudinis*. A faftigiate ftem, having branches of an equal height.—Faftigiati pedunculi: *cum*

ita

ita attollunt fructificationes in fasciculum, ut superne aequales altitudines evadant, ac si horizontaliter detonsi essent. Peduncles are fastigiate, when they elevate the fructifications in a bunch, so that they are all of an equal height, as if they had been shorn off horizontally—or, when they are so proportioned, as to form an even surface at top, like a flat roof: as in *Dianthus* and *Silene.*—Umbella fastigiata: *gradatim assurgens.* Delin. pl. A fastigiate umbel, rising gradually. This is a different idea from the former: and in *Philos. botan.* the umbellate flower is thus described—*est aggregatus ex flosculis pluribus insidentibus receptaculo in pedunculos fastigiatos, omnes ex eodem puncto productos.*—Here we are probably to understand *fastigiatos* in the former sense of *level-topped*: but I am at a loss to conceive how Linneus came to annex this idea to *fastigium* and its derivatives; since roofs are not flat in northern countries; and although they be so in the east, and in some parts of Italy, yet *fastigiatus* seems applied to lofty and pointed buildings. Thus Solinus says of the pyramids—*turres sunt in Ægypto fastigatæ, ultra celsitudinem omnem, quæ fieri manu possit.*

Favosum *receptaculum.* A honey-combed receptacle. See *Alveolate.*

Faux. The jaws, chaps, throat, or opening of the tube of the corolla—or, between the segments of the corolla, where the tube ends.—As in the clafs *Didynamia*; and the *Afperifoliæ* in clafs *Pentandria*.—*Hiatus inter lacinias corollæ ubi tubus terminatur.*—The whole upper part of the tube is called the neck, *collum*: and the opening is fometimes termed the mouth, *os*.

Feathered. *Plumofus*. See *Down* and *Plumofe*.

Some put feathered for pinnate, but improperly.

Female plant. *Femina planta*. Which has female flowers only. *Quæ floribus tantum femineis*. *Female flower*. Femineus flos. Which has piftils or ftigmas, without ftamens, or at leaft anthers.

Ferns. See *Filices*.

Ferruginous colour. *Color ferrugineus*. The colour of rufty iron.

Fibre. *Fibra*—of a root. A thread or longitudinal canal, imbibing moifture from the earth. *Canalis longitudinalis humidum terræ fugens.*—Thefe fibres properly conftitute the roots of vegetables; the main body, from whence they ufually proceed, is the defcending trunk;

 and

and will, in many plants, become a trunk, if the plant be turned upſide down.

A branch or ſubdiviſion of a fibre is called a fibril. *Fibrilla.*

A root conſiſting wholly of fibres, as in many Graſſes, is termed a fibrous root. *Radix fibroſa.*

FILAMENT. *Filamentum* (*Filum*, a thread). The thread-like part of the ſtamen, ſupporting the anther, and connecting it with the flower. *Pars elevans adnectenſque antheram.*

Filaments, in the ſame flower, are—1. Equal, or all of the ſame length. 2. Unequal, or of different lengths. 3. Connate, or united. 4. Alternate. Moſt filaments are ſimple; ſome few are bifid; and others Tricuſpidate, or broad and trifid at the end.

FILICES. *Ferns.* The fourth family; and the ſixth great tribe or nation, in Linneus's general diſtribution of vegetables. The firſt order of the claſs *Cryptogamia* in his artificial ſyſtem. The ſixty-fourth order in his fragments of a natural method: and the fifty-fifth of his natural orders, at the end of *Gen. pl.*

FILIFORM (*filiformis*). Thread-ſhaped. Of equal thickneſs from top to bottom, like a thread.

Applied to peduncle, filament, ſtyle, and receptacle.—It ſeems to me more elegant to uſe filament and filiform, than to tranſlate them by thread, and thread-ſhaped.

Fimbriatus. Fringed. *Fere idem ac decurrens in caule, & ciliatus in flore.* Giſeke.—Almoſt the ſame with decurrent in the ſtem, and ciliate in the flower.—It appears to me, that it has no relation to the firſt, and that it is ſufficiently diſtinct from the ſecond.—I do not find this term either in *Philoſophia Botanica* or *Delineatio Plantæ.* See *Fringed.*

Fingered leaf. See *Digitate.*

Fissum folium. *Diviſum ſinubus linearibus, marginibuſque rectis.*—Hinc *bifidum, trifidum, quadrifidum, quinquefidum,* &c. *multifidum,* a numero ſinuum.—*Indiviſo* opponitur. See *Cleft.*

Fistulosus (*fiſtula,* a pipe) caulis. A fiſtulous ſtem. Hollow like a pipe or reed. Oppoſed to *farctus,* ſtuffed or full.—*Fiſtuloſum folium,* a fiſtulous leaf; as in *Oenanthe fiſtuloſa.*—*Fiſtuloſum nectarium,* a fiſtulous nectary; as in *Aconitum.*

Five-cleft. *Quinquefidus.* See *Cleft.*

Five-fold leaves. *Quina folia.* In fives; growing by fives; or five and five together.

Five-lobed leaf. *Quinquelobatum folium.* See *Lobed.*

Five-parted leaf. *Quinquepartitum folium.*—*Corolla quinquepartita.* See *Parted.*

Five-toothed. *Quinquedentatus.* Applied to *Petal* and *Capsule.* See *Dentatum.*

Five-valved. *Quinquevalvis.* Applied to the *capsule.* See *Valve.*

Flaccidus caulis, pedunculus. A flaccid stem or peduncle. So feeble as not to support its own weight. Linneus uses it in the same sense with *laxus*, and in opposition to *strictus* —The flaccid stem is exemplified in *Galium Mollugo.*

Flagellum. A Runner. *Caules longiores decumbentes, internodiis tantum remotis aut apice gemmantes.* Giseke. See *Runner.* Hence a sort of Cactus has the name of *flagelliformis*, because it resembles the lash of a whip (*flagellum*).

Flat leaf. *Folium planum.* Having an even surface; in opposition to channelled, grooved, &c.—When applied to succulent leaves, it has

 both

both ſurfaces parallel, neither convex nor concave, in oppoſition to gibbous.

FLATTED. *Compreſſus.* Better expreſſed by *Compreſſed*—which ſee.

FLESHY leaf. *Folium carnōſum.* Full of pulp within: as in *Sedum* and other ſucculent plants. The ſubſtance more ſtiff than in the pulpy leaf: *folium pulpoſum.*—Applied to the capſule in *Meſembryanthemum*—and to the root, in *Valerian*, &c.

FLEXIBLE. *Flexĭlis.* Eaſily bent. Applied to the ſtem, and raceme.

FLEXUOSE. *Flexuōſus.* Changing its direction in a curve—from joint to joint or from bud to bud in the ſtem, as in *Ptelea*, *Smilax*, *Solidago flexicaulis*—from flower to flower in the peduncle, as in *Aira flexuoſa* and ſome other Graſſes. *Secundum articulos, vel a gemma ad gemmam,* ſ. *a flore ad florem horſum vorſum flexus.*

FLOATING leaf. *Folium natans.* Lying flat on the ſurface of the water.

FLORAL bud. *Gemma florālis.* Containing the flowers. In oppoſition to *foliaris*, containing the leaves. See *Bud.*—Floral leaf. *Folium florale.*

florale. Immediately attending the flower, but different from the Bracte, which fee.

Florescentia. Florefcence, or the Flowering feafon. The time when vegetables ufually expand their flowers.

Floret. *Flofcŭlus.* The partial or feparate little flower of an aggregate flower: chiefly in the clafs *Syngenefia*, or compound flowers properly fo called; but applied alfo to the umbel, cyme, &c.—I prefer *floret* to *flofcule*, becaufe it is a regular diminutive of *flower*.

Flos. See *Flower.*

Flosculosus flos. A flofcular flower. A term of Tournefort's, for which Linneus fubftitutes *tubulofus*. It is oppofed to *femi-flofculofus*—*ligulatus* of Linneus. See *Tubulofus*.

Flosculus, *eft flos partialis floris aggregati, compofiti, umbellati, cymofi.* See *Floret.*

Flower. The organs of generation in vegetables, with their coverings.—A flower, when complete, confifts of a calyx, corolla, ftamen, and piftil; but the effential parts are the anther and ftigma, which are fufficient to conftitute a flower, either together in hermaphrodite flowers, or feparate in male and female flowers.

Flower-ſtalk. See *Pedunculus.*

FOLIACEA *ſpica.* A leafy ſpike. Having leaves intermixed with the flowers.—*Glandulæ foliaceæ.* Leafy glands, or glands ſituated on the leaves. See *Gland.*

FOLIARIS *cirrus.* A tendril placed on the leaf.—*Foliaris gemma.* A leaf bud. Containing leaves, not flowers.

FOLIATIO f. *Vernatio.* Foliation, vernation or leafing. The diſpoſition of the naſcent leaves within the bud.—The different modes of Foliation are by—1. *Involution.* 2. *Revolution.* 3. *Obvolution.* 4. *Convolution.* 5. *Imbrication.* 6. *Equitation.* 7. *Conduplication.* 8. *Plaiting.* 9. *Reclination.* 10. A *Circinal* or ſpiral direction. See theſe terms explained in their proper places.

FOLIATUS *caulis.* A leafy ſtalk. In oppoſition to *Aphyllus*, leafleſs.

FOLIOLUM (dimin. of *folium*). *Partiale eſt folii compoſiti.* See *Leaflet.*

FOLIOSUM *capitulum.* A leafy head. Having leaves intermixed with the flowers.

FOLIUM (from φυλλον). *Organum motus plantæ.* Delin. pl.—*Folia tranſpirant & adtrahunt (uti*

Pulmones

Pulmones in Animalibus), *umbramque præbent—in se tamen re ipsa musculi analoga sunt, licet non uti in animalibus caudâ affixa, cum motus voluntarius in his dari nequeat.* Philos. botan.—*Folium expandens per aera superficiem, volatile, sæpe petiolatum.* Regn. veg. See *Leaf.*

Folliculus (dimin. from *follis*, a bag) a follicle. A univalvular pericarp, opening on one side longitudinally, and having the seeds loose in it. *Pericarpium univalve latere altero longitudinaliter dehiscens, nec suturæ semina affigens.* Exemplified in *Asclepias*, *Apocynum*, *Stapelia.*—See *Conceptacle.*

In Philos. Botan. Follicles (*folliculi*) are vessels distended with air: as at the root in *Utricularia*, and on the leaves in *Aldrovanda.*

Foot. *Pes.* A measure from the bend of the elbow to the base of the thumb.

Footstalk, has been put by English writers both for the *peduncle* and *petiole.* See those two words.

Fork. *Furca.* A divided prickle. *Aculeus in plures divisus.* Called *bifid* or *trifid* from the number of divisions. Exemplified in *Berberis*, *Ribes*, *Gleditsia*, &c.

Forked,

Forked, *furcātus*: branched or ſubdivided, uſually into two.—Applied to anthers—to briſtles; as in *Leontodon hiſpidum*, *Arabis thaliana*—to fronds, as in *Jungermannia furcata*—and to ſtems; but dichotomous is more proper.

FORNICATUS (*fornix*, an arch or vault). Arched or vaulted: which ſee.

FOVILLA. A fine ſubſtance, imperceptible to the naked eye, exploded by the pollen in the anthers of flowers.

FOUR-CLEFT leaf. *Folium quadrifidum.*—See *Cleft.*

FOUR-CORNERED ſtem or peduncle. *Tetragonus caulis—pedunculus.* As in Verticillate plants.—*Siliqua tetragona*, a four-cornered ſilique, as in *Sinapis nigra.*

FOUR-FOLD leaves. *Folia quaterna.* Four together, or by fours, at each joint or whorl; as in *Sherardia fruticoſa*, *Aſperula taurina*, *cynanchica*, &c. ſeveral of the *Galiums*, *Erica herbacea*, &c.

FOUR-LEAVED tendril. *Cirrus tetraphyllus.* Four leaves to each tendril; as in *Lathyrus ſativus.*

FOUR-

FOUR-LOBED leaf. *Folium quadrilobātum.* See *Lobed.*

FOUR-PARTED leaf. *Folium quadripartītum.* See *Parted.*

FRINGED corolla.—*Fimbriāta.* The edge furrounded by hairs or briftles not parallel or fo regularly difpofed as in the *ciliate* corolla. Exemplified in *Menyanthes trifoliata.*

FROND. *Frons:* anciently written *fruns* (from Βρυω, *pullulo*, to germinate or bud); and fignifying a twig of a tree with its leaves. Linneus applies this term to the peculiar leafing of Palms and Ferns. He defines it to be a kind of trunk or ftem, which has the branch united with the leaf, and frequently with the fructification.—*Frons, folium e ftipite factum.*—*Stipes, truncus a folio non diftinctus.* Regn. veg.

FRONDESCENTIA. Leafing feafon. *Tempus æftatis, quo fpecies fingulæ plantarum prima folia explicant.* The time of the year when plants firft unfold their leaves.

FRONDOSUS *caudex.* A frondofe ftem; applied to Palms.—*Frondofus prolifer flos;* a leafy proliferous flower. It fometimes happens in the *Rofe, Anemone,* &c.

FRUC-

FRUCTESCENTIA *comprehendit tempus, quo ſemina matura diſpergunt Plantæ.*—Fructeſcence, or the fruiting ſeaſon, is the time when vegetables ſcatter their ripe ſeeds.

FRUCTIFICATIO: *vegetabilium pars temporaria, generationi dicata, antiquum terminans, novum incipiens.* Fructification, or fruiting, is a temporary part of vegetables, appropriated to generation, terminating the old, and beginning the new vegetable.—The eſſence of it conſiſts in the flower and fruit; and there is no fructification without *anther*, *ſtigma*, and *ſeed*.—When perfect, it conſiſts of ſeven parts—— 1. Calyx. 2. Corolla. 3. Stamen. 4. Piſtil. 5. Pericarp. 6. Seed. 7. Receptacle.—Of theſe, the four firſt belong to the flower; the two next to the fruit; and the laſt is common to both.

FRUCTUS. Semen cum pericarpio.

FRUIT: *fructus.* The ſeed with its pericarp. It is a fruit, however, whether there be a pericarp or not.

Fruit-ſtalk. See *Peduncle.*

FRUSTRANEA (*fruſtra*, in vain) *polygamia.* The name of the third order in the claſs *Syngeneſia* of

of Linneus's artificial fyftem; comprehending fuch of the Compound flowers as have perfect florets in the difk, producing feed; but imperfect florets in the ray, which for want of a ftigma are barren.—*Cum flores difci hermaphroditi ftigmate inftruuntur & femina proferunt; flofculi vero radium conftituentes, quum ftigmate careant, femina proferre nequeunt.*

Frutescens *caulis.* A frutefcent ftem. From herbaceous becoming fhrubby. As in *Chironia baccifera* and *frutefcens.*

Frutex. A fhrub. *Caulis adfcendens fupra terram abfque gemmis—fed intra Fruticem & Arborem nullos limites pofuit natura, fed opinio vulgi.* See *Shrub.*

Fruticosus *caulis.* A fhrubby ftem. *Perennis cum caudicibus pluribus.* See *Shrubby.*

Fugax. Fugacious, fleeting, of fhort continuance, foon falling off: as the corolla of fome flowers.

Fulcrum, (from *fultum,* which is from *fulcio*) Fulcre, prop, or fupport. A help to vegetables for their commodious fuftentation.—*Fulcra adminicula plantæ funt, pro commodiore fuftentatione.*

Fulcres

Fulcres are of ſeven kinds.—1. *Stipula* or Stipule. 2. *Bractea* or Bracte. 3. *Spina* or Thorn. 4. *Aculeus* or Prickle. 5. *Cirrus*, Claſper or Tendril. 6. *Glandula*, a Gland. 7. *Pilus*, Hairs or Pubeſcence.

In Delin. pl. theſe are otherwiſe enumerated. 1. *Petiolus*, the petiole, leaf-ſtalk or foot-ſtalk. 2. *Stipula*. 3. *Cirrus*. 4. *Pubes*. 5. *Arma*, Arms or inſtruments of defence; comprehending Prickles, Thorns and Stings. 6. *Bractea*. 7. *Pedunculus*, the peduncle, flower-ſtalk and fruit-ſtalk.—Theſe terms are explained in their ſeveral places.

Fulcratus caulis — ramus. A ſtem or branch fulcrated, or furniſhed with fulcres.

Botaniſts frequently uſe the Latin word, with the Latin plural—*fulcra*—in Engliſh, which I cannot approve.

Full flower. *Flos plenus*. When the corolla is ſo multiplied as to exclude all the ſtamens. Polypetalous flowers are generally the object of plenitude. See *Luxurians*.

Fungi, Funguſes or Muſhrooms. The firſt of the great Families; and the ninth of the Nations, Tribes, or Caſts, into which Linneus has diſtributed the whole Vegetable world. Alſo the

the ſixty-ſeventh order in his fragments of a natural method: the fifty-eighth of his natural orders; and the fourth order of the claſs *Cryptogamia*, in his artificial ſyſtem.

FUNNEL-SHAPED corolla. *Infundibuliformis corolla.* Monopetalous and conical, with a tubular baſis: as in *Lithoſpermum, Cynogloſſum, Pulmonaria.*

FURCA. See *Fork.*

FURROWED, fluted, or grooved Stem. *Caulis ſulcatus.* Marked with deep broad channels longitudinally.—Applied ſometimes to the leaf.

FUSIFORMIS (*fuſus*, a ſpindle) *radix.* Fuſiform or Spindle-ſhaped root. Simple or generally ſo, tapering downwards to a point: as in *Radiſh, Carrot, Parſnep.* Applied alſo to the leaf, as in *Craſſula rubens.*

G

GALEA (an helmet). The upper lip of a ringent corolla. Linneus uses the words *labium superius* or upper lip.

GAPE. *Rictus*. The opening between the two lips, in an irregular corolla.

GAPING corolla. *Hians*. In opposition to closed, *clausa*.

GASHED leaf. *Folium incisum s. dissectum*. Having the sections or divisions usually determinate in their number; or at least more so than in the Laciniate leaf.—The *Gashed* differs from the Cleft leaf (*fissum*), in having the sections extending but little beyond the edge (though deeper than in the crenate leaf); whereas in the cleft leaf they reach almost to the middle. See *Dissectum* and *Laciniatum*.

Hence Linneus has formed several compound terms, which see under *Incisum*.

GEMINA folia. *Eodem petiolo duo folia annectente*. —Geminæ stipulæ. *Duæ & duæ per paria*.—Geminatus pedunculus. *Ex eodem puncto bini*. See *Double*.

GEMMA. A Gem or Bud. *Hybernaculum plantæ e rudimentis foliorum præteritorum.* See *Bud.*

GEMMATIO. Gemmation or Budding. *Gemmæ constructio—ex foliis, stipulis, petiolis* aut *squamis.* —The construction of the Bud; from leaves, stipules, petioles or scales.

GEMMIPARUS. Gemmiparous. Producing gems or buds.

GENERIC Character. The definition of the Genus. This is factitious, essential or natural. See *Genus* and *Character.*

Generic Name. *Cognomen gentilitium.* The family surname, as it were, of vegetables. See *Names.*

GENICULATUS. Kneed. Applied to a stem, peduncle or awn, forming a very obtuse angle at the joints, as when the knee is a little bent. —In *Delin. pl.* it is explained to be—*internodiis interceptus*, which is the same with *nodosus.* In my opinion this is the difference—that *nodosus* means knotty, or merely having knots; whereas *geniculatus* implies, that the stem is bent in an angle at the joint. *Flexuosus* is totally different from this, for it implies deviation in a *curve*, not at an angle. See *Knotted.*

Geniculum (dimin. from *Genu*). Knee, knot, or joint. Properly a joint, where there is a bending, like that at the knee: but frequently put for a joint in general; and then ſynonymous with *nodus*. See *Knot* and *Knotted*.

Gentes. Nations, great Tribes, or rather Caſts of Vegetables. Linneus makes nine of them— 1. *Palmæ*. 2. *Gramina*, or Graſſes. 3. *Lilia*. 4. *Herbæ*. 5. *Arbores*, Trees. 6. *Filices*, Ferns. 7. *Muſci*, Moſſes. 8. *Algæ*. 9. *Fungi*.—The only difference between this arrangement and that of *Families* is, that the third, fourth, and fifth diviſions of this are included in the ſeventh of that.

Genus. The third ſubdiviſion in a ſyſtematical arrangement of vegetables: containing plants of the ſame claſs and order, which agree in their parts of fructification.—*Genera tot dicimus, quot ſimiles conſtructæ fructificationes proferunt diverſæ ſpecies naturales.* Philoſ. bot.—*Genera tot ſunt, quot attributa communia proxima diſtinctarum ſpecierum, ſecundum quæ in primordio creata fuere.* Gen. pl. in præf.

Genuſes making an awkward plural, and *genera* not being Engliſh; I have often wiſhed that we might be allowed to ſubſtitute *kind* for *genus*, and *ſort* for *ſpecies*.

Germen. Germ, Ovary or Seed-bud. *Rudimentum fructus immaturi in flore.* The rudiment of the fruit yet in embryo.—Analogous to the *Ovarium*, ſince it contains the rudiments of the ſeeds.—It is the lower part or baſe of the piſtil, which ſee. *Germ*, differing little from the Latin term, and being ſufficiently eſtabliſhed as an Engliſh word, may be uſed in preference to *Germen*: ſuch, however, as adopt the latter, will, I hope, when they write in Engliſh, uſe *Germens* in the plural, and not *Germina*.

A Germ, when it is included within the corolla, is ſaid to be *Superior*; but when placed below the corolla, *Inferior*.—On the contrary, when a corolla is placed above the germ, it is called *Superior (corolla ſupera, flos ſuperus)*; and when it incloſes the germ, ſo as to have its baſe below it, then it is called *Inferior (corolla infera, flos inferus)*.—When a germ is elevated on a fulcre, beſides the peduncle, it is ſaid to be *Pedicelled*, pedicellatum.

Germinatio *eſt tempus, quo ſemina terræ mandata eadem excludunt in cotyledonum proventum.* The time which ſeeds take to vegetate.

Gibbous leaf. *Folium gibbum.* Having both ſurfaces convex, by means of a very abundant

 pulp.—

pulp.—*Quod utramque superficiem facit convexam, mediante copiosiore pulpa.* See *Convex.*—This term, when applied to a perianth, means only swelling out at bottom. Instances of this we have in the classes *Diadelphia* and *Tetradynamia.*

Glaber *caulis. Glabrum folium.* A smooth stem or leaf. *Superficie lævi, absque omni inæqualitate.* Philos. botan. where it is opposed to *tomentosum.* In Delin. pl. it is explained to be—*superficie lubrica.* See *Smooth.*

Gladiata *siliqua. Gladiatum legumen.* A gladiate or sword-shaped silique or legume. As in *Cleome arabica. Dolichos ensiformis.*

Glandula. A Gland or Glandule. *Papilla humorem excernens.* Or, as it is explained in Regn. veg.—*fulcrum secernens liquorem.* An excretory or secretory duct or vessel. Exemplified in *Urena, Ricinus, Iatropha, Passiflora, Cassia, Opulus, Turnera, Salix tetrandra, Heliocarpus, Bryonia zeylanica, Acacia cornigera, Bauhinia aculeata, Prunus armeniaca, Amygdalus, Morisona.*

Glands are usually found on the leaves—the petioles—the peduncles—or the stipules.

Glandulatio. Vasa secretoria offert. The situation and structure of glands.

Glan-

Glandulōſum folium. Quod glandulas inſidentes gerit, vel in dorſo, vel in ſerraturis. A glandular leaf, is that which has glands either on the ſurface or on the ſerratures.

Globosus. Globoſe, Globular, Spherical—radix: *ſubrotunda radiculis lateralibus*, root—roundiſh, with lateral fibres; as in *Bunium, Ranunculus*.—Globoſum capitulum: *undique rotundum*. A globular head of flowers, round on all ſides.—Globoſa corolla; a corolla or flower round like a ball; as in *Trollius*.—Applied alſo to the Receptacle—to the Germ—and to Seeds.

Globoſo-depreſſum pericarpium. A flatted-globular, or more properly an oblate ſpheroidal pericarp or fruit.

Glochis (γλωχὶς, cuſpis, a point). Glochides: *mucrones apice retrorſum multidentati, nec curvati*.—In Philoſ. botan. we have *hami triglochides*, as in *Lappula*; but the *hamus* or hook has a curved point—the *glochis* a ſtraight one. See *Barb*.

Glomerata (*glomero* from *glomus*, a clue of yarn or thread) ſpica—~~panicula. A glomerate~~ ſpike—*ſpiculis varie congeſtis*; having the ſpikelets or component ſpikes variouſly heaped together; as in *Panicum italicum*.—The glomerate panicle is exemplified in *Poa ciliaris*, and *Dactylis glomerata*.—The flowers grow pretty cloſe together,

ther,

ther, in a globular or sub-globular form.— Scaliger derives *Glomus* from *Globus*; but others on the contrary derive *Globus* from *Glomus*.

Glomerulus (dimin. from *Glomus*). A Glomerule, or ſmall glome.

Glomus, a Glome, or roundiſh head of flowers.

Gluma. Glume (from *glubo*, denudo, corticem detraho, to bark, or take the bark from a tree; from the Greek γλυφω, to ſcrape or carve). *Calyx graminis, valvis amplexantibus.* The calyx or corolla of corn and graſſes, formed of valves embracing the ſeed.—It is thus explained by Varro (de R. R. I. c. 48): "Spica—in ordeo "& tritico tria habet continentia, *granum*, *glu-* "*mam*, *ariſtam*.—Gluma eſt folliculus ejus.— "Ariſta & granum omnibus fere notum: gluma "paucis.—Videtur vocabulum etymon habere "a glubendo, quòd eo folliculo deglubitur "granum."

Uniflora, *bi-* & *multiflora*. Having one, two or many flowers. *Univalvis*, *bi-* & *multivalvis*. Having one, two or many valves. *Colorata*, coloured; of any colour but green, the uſual one. *Glabra*, ſmooth. *Hiſpida*. Hiſpid, ſhaggy, or rough with hairs.

Glumosus

Glumosus flos: *habet receptaculum filiforme, cujus basis instruitur gluma communi.* — A glumose flower, is a kind of aggregate flower, having a filiform receptacle, with a common glume at the base.—As in corn and grasses, *Scirpus, Cyperus, Carex.*

Glutinositas *(gluten,* glue). Glutinosity or glueiness. *Qualitas humoris lubrici.* The quality of slippery moisture.

Glutinosum folium. A glutinous leaf. *Humore lubrico illitum.* Besmeared with slippery moisture.

Gramina. Grasses. The fifth family, and the second nation, tribe or cast in Linneus's general division of the vegetable kingdom. The fourteenth order in the fragments of a natural method in Philos. botan.—and the fourth of the natural orders at the end of Gen. pl.—In the artificial system, most of the grasses are contained in the second order of the fifth class.

Granulata *radix.* A granulate root. *Particulis carnosis adspersa.* Consisting of several little tubers or fleshy knobs, resembling grains of corn: as in *Saxifraga granulata.*

Grooved. See *Furrowed.*

GYMNOSPERMA *planta* (*γυμνος naked*, and *σπερμα ſeed*). A plant bearing naked ſeeds; in oppoſition to that which has the ſeeds incloſed in a capſule or other veſſel.

GYMNOSPERMIA. The name of the firſt order in the claſs *Didynamia*, in Linneus's artificial arrangement; comprehending thoſe plants which have four ſtamens, of which the two middle ones are ſhorter than the two outer ones, within a ringent flower, ſucceeded by four naked ſeeds. — Theſe are the ſame with the *Labiati* of Tournefort; and the *Verticillatæ* of Ray, and Linneus in his natural orders. — See *Didynamia* and *Angioſpermia*.

GYNANDRIA (*γυνη a woman*, and *ανηρ a man*). The name of the twentieth claſs in the Linnean artificial ſyſtem, containing all plants with hermaphrodite flowers, which have the ſtamens growing upon the ſtyle; or elſe having an elongate receptacle bearing both ſtamens and ſtyles. This claſs has been conſiderably reduced by ſome modern reformers, and the plants referred to other claſſes.

HABI-

H

HABITATIO plantarum. *Locus ubi sponte prognascuntur.* The native place of growth of plants. Called by some, barbarously and vulgarly, their *habitat*.

HABITUS plantæ. Commonly called the *habit* of plants; but more properly their *air*, *port*, or general external appearance. Linneus defines it to be, a certain conformity which kindred or congenerous vegetables have in their placentation, rooting, branching, intorsion, budding, leafing, stipulation, pubescence, glandulation, lactescence, florescence, &c.

Hence such characters are called *Characteres habituales*. And these, though not sufficient of themselves to distinguish vegetables, yet frequently make them known at first sight. Many of the natural classes are directly apparent from this general similitude—as the *Caryophylleæ*, *Verticillatæ*, *Asperifoliæ*, *Umbellatæ*, *Leguminosæ*, *Siliquosæ*, *Columniferæ*, *Filices*. In forming the characters of the genus, these have been neglected,

glected, ſince the fructification has been thought amply ſufficient for the purpoſe.

HAIR. *Pilus.* A ſpecies of pubeſcence, or excretory ducts on the ſurface of plants; long, ſtraight and diſtinct.

HAIRY leaf. *Folium piloſum.* Covered with hairs—applied alſo to the ſtyle and to ſeeds. *Hairy receptacle.* Having hairs between the florets.

Halbert-ſhaped. See *Haſtate.*

HALVED head. *Dimidiatum capitulum.* Hemiſpherical, or reſembling half a head: round on one ſide and flat on the other.—A halved ſpathe. *Dimidiata ſpatha.* Inveſting the fructification on one ſide only.—A halved involucre. *Dimidiatum involucrum.* Placed wholly on one ſide; as in *Æthuſa.*

HAMUS. A hook. *Mucro acuminatus curvatus.* Hamus ſeminis: *quo adhæret animalibus.* See *Hook* and *Pubeſcence.*

HAMOSUS. Hooked. *Hamoſa ſeta.* A briſtle curved at the end.

HAND. A meaſure taken from the breadth of the

the hand; or four inches. See *Meaſures* and *Palm*.

Handed root—leaf. See *Palmata*.

Hanging leaf. *Folium dependens*. Pointing directly to the ground.

Hastate leaf. *Folium haſtatum*. Reſembling the head of a halbert. Triangular, hollowed at the baſe, and on the ſides, with the angles ſpreading.—*Triangulare, baſi lateribuſque excavatis, angulis patulis*. Philoſ. bot.—In Delin. pl. it is thus explained. *Sagittatum, angulis poſticis ſinu diviſis ad latera prominentibus*.—Exemplified in *Rumex* and *Scutellaria haſtifolia*.

Hatchet-form. See *Dolabriform*.

Head. *Capitulum*. A ſpecies of infloreſcence, or a manner of flowering, in which ſeveral flowers form a kind of ball. As in *Gomphrena*. This is globular—roundiſh—or halved. Leafy —or naked.

Flowers in this caſe are ſaid to grow in a head. *Capitati flores*.—A ſtigma round like a ball, is called *Capitatum ſtigma*.

Heaped panicle. *Congeſta panicula*. Abundant in flowers, but not ſo cloſe as in *denſa panicula*.

Heart

HEART of a ſeed. *Corculum.* The rudiment of the future plant. It conſiſts of the Plume (*Plumula*) and Roſtel (*Roſtellum*).

HEART-SHAPED Leaf. *Folium cordatum.* Somewhat ovate, hollowed at the baſe, without poſterior angles.—It may be called either *cordate* or *heart-ſhaped*; but I diſlike *hearted*.

HEART-TONGUED Frond. *Cordato-lingulatus frons.* Tongue-ſhaped, and hollowed at the baſe. As in *Aſplenium Scolopendrium*.

HEDGE-HOGGED Pericarp. *Echinatum pericarpium.* Beſet with prickles. A round prickly ſet of flowers, like a hedge-hog, is called *Echinus*: a Burr.

HEDGE-HOG-HOOKED. *Echinato-uncinata ſpica.* A ſpike beſet with prickles which are hooked at the end.

HELMET. *Galea.* The upper lip of a ringent corolla.

HELMET-TUBED Petal. *Galeato-tubulatum petalum.* Having the tube ſhaped like a helmet.

HEMISPHERICAL Calyx or Nectary. In form of half a ſphere. The firſt exemplified in *Tanacetum*: the ſecond in *Narciſſus Jonquilla*.

HEPTANDRIA (ἑπτὰ *seven*, and ανηρ *a husband*). The ſeventh claſs in the ſyſtem of Linneus, comprehending thoſe plants which have ſeven ſtamens to the flowers.

HERB. *Herba.* In common language *an Herb* is uſed in oppoſition to a *Tree*. By Linneus *the* herb is put for that part of a vegetable, which ariſes from the root, is terminated by the fructification, and comprehends the ſtem, leaves, fulcres, and hybernacle.— *Vegetabilis pars, orta a radice, terminata fructificatione, comprehenditque truncum, folia, fulcra, hybernaculum.* Philoſ. bot.—*Herba adſcendens, aëria ſpirans, movens.* Regn. veg.

Herbaceous plants, are ſuch as periſh annually down to the root.

Herbaceous ſtem, periſhing annually, ſoft not woody.

Herbs conſtitute the fourth nation, great tribe or caſt, into which Linneus divides all vegetables. See *Gentes*.

HERMAPHRODITE flower. *Hermaphroditus flos.* Having both anther and ſtigma. An *Hermaphrodite plant* is that which has only hermaphrodite flowers.

HESPERIDEÆ. The name of the forty-firſt order

in Linneus's fragments of a natural method; containing only three genera—Citrus, Styrax, Garcinia.

HEXAGONUS *caulis*. A hexagonal ſtem. Having ſix angles.

HEXAGYNIA (εξ *ſix*, and γυνη *a woman*). One of the orders in the ninth and thirteenth claſſes of the Linnean ſyſtem; containing thoſe plants which have ſix ſtyles in the flowers.

HEXANDRIA (εξ and ανηρ, *a man* or *huſband*). The name of the ſixth claſs in Linneus's ſyſtem; comprehending thoſe plants which have hermaphrodite flowers with ſix equal ſtamens.—This is a natural claſs, nearly the ſame with the *Lilia* or *Liliaceous plants* of other writers; and contains a great part of the ſixth, ninth, tenth, and eleventh orders, in Linneus's natural arrangement, with the admixture of ſome others.

HEXAPETALA *corolla*. A corolla conſiſting of ſix diſtinct petals.

HEXAPHYLLUS *calyx*. A calyx of ſix leaves or leaflets.

HILUM. The Eye—commonly ſo called in the bean.

bean. The external mark or ſcar of the umbilical chord on ſome ſeeds, where they adhere to the pericarp.—*Cicatrix umbilicalis.* Regn. veg.—*Cicatrix externa ſeminis ab ejuſdem affixione in fructu.* Philoſ. bot.—As in *Cardioſpermum*, *Staphylæa*, *Dolichos*, &c.

Hirsutus. Hirſute, rough, ſhaggy.—Nearly the ſame with *hiſpid*, but having more hairs or briſtles, and leſs ſtiff. Applied to the ſtem—frond—calyx, as in *Serratula alpina*—and legume, as in *Lathyrus odoratus*.

Hirtus. Rough-haired. Nearly the ſame with *hirſutus*. The hairs ſtiffer than in *piloſus*.

Hispidus. Hiſpid. *Hiſpidus caulis*, a hiſpid ſtem. Beſet with ſtiff briſtles, as in *Braſſica Erucaſtrum*.—*Hiſpidum folium*, a hiſpid leaf. Having brittle ſtiffiſh briſtles ſcattered over the diſk, as in *Turritis hirſuta*.

Since we cannot eaſily find ſignificant Engliſh terms for all the numerous varieties of pubeſcence, it is perhaps beſt to uſe the Latin terms where we can. Thus here, *hirſute* and *hiſpid* are preferable to *ſhaggy* and *briſtly*: but *hirtus* not being convertible to an Engliſh word, we muſt ſubſtitute *rough-haired*, or *rough with hairs*.

Hoary leaf. *Folium incanum.* Covered with a white pubeſcence: as in *Draba incana*, *Ciſtus incanus*.

Holeraceæ, *Holeraceæ*, commonly written *Oleraceæ* (from *Olus*, anciently *Holus*, a pot-herb). The name of the twelfth order in Linneus's natural orders; and the fifty-third in his fragments of a natural method: containing *Spinach*, *Beet*, &c. &c.

Hollow ſtem. *Cavus truncus*, ſ. *culmus*. As in corn, reeds, &c.

Hollow-tubular. Tubulato-cavus.

Honey-cup.—*Nectarium*. Honey-cup is improper, becauſe few Nectaries are in form of a cup; not more ſo indeed than *glaſs ink-horn*, *ſilver terrene*, *Dreſden China*, and many other barbariſms. But why multiply theſe unneceſſarily?

Hoofed or *Hoof-ſhaped*. Ungulatus. Exemplified in the ſilicle of the *Roſe of Jericho*.

Hook. *Hamus*. A crooked pointed proceſs.

Hooked. Hamoſus.—A hooked briſtle. *Hamoſa ſeta*. A ſort of pubeſcence, in which the end of the briſtle is curved. See *Uncinatus*.

Hori-

Horizontal leaf. *Horizontale folium.* Making a right angle with the ſtem—having the upper ſurface turned towards the ſky.—*Quod ad angulum rectum a caule diſcedit.* Philoſ. bot. *Paginam ſuperiorem cœlo obvertens.* Delin. pl. See *Adverſe.*—*Horizontalis flos;* a horizontal flower. Parallel with the ſurface. *Æquori parallelus.*—*Radix horizontalis;* a horizontal root. Running immediately under the ſurface, and parallel to it.

Horn or Spur. *Cornu* ſ. *Calcar.* The hinder hollow part of the nectary in ſome flowers, extended in a conical form: as in *Orchis*, *Larkſpur*, &c.—*Conica productio baſeos.*

Hybernaculum. The Hybernacle.—*Herbæ compendium ſuper radicem antequam excreſcit.* Philoſ. bot.—*Compendium herbæ totius, ſquamoſum.* Regn. veg.—A compendium of the whole herb, before it grows up. Or, in which the embryo of the future plant is incloſed by a ſcaly covering, and ſecured from external injuries during the winter.—It is either—a bulb (bulbus); formed from the remains of paſt leaves—or a bud *(gemma)*, from the rudiments of future leaves.

Hybrida *planta.* A hybrid or hybridous plant,

 or

or mule. A monſtrous vegetable produced from the mixture of two different ſpecies.

HYPOCRATERIFORMIS *corolla*. A ſalver-ſhaped corolla. Monopetalous, with the border ſpreading out horizontally or flat from the tube like an old-faſhioned ſalver. As in ſome of the *Aſperifoliæ*.—*Heliotropium*, *Myoſotis* :—in *Diapenſia*, *Aretia*, *Androſace*, *Hottonia*, *Phlox*, *Samolus*.

I

JAG. *Lacinia*. A diviſion or cleft in a leaf, calyx or corolla. This term relates chiefly to monophyllous calyxes and monopetalous corollas. Theſe are named bifid, trifid, &c. according to the number of jags.

JAGGED. *Laciniatus*. Cleft or divided. A jagged leaf. *Folium laciniatum*. Divided irregularly, and the parts ſubdivided indeterminately.

JAWS. See *Faux*.

ICOSANDRIA (*εικοσι twenty*, and *ανηρ a huſband*). The name of the twelfth claſs in the Linnean ſyſtem: comprehending thoſe plants which have hermaphrodite flowers, with twenty or more ſtamens, growing on the inſide of the calyx, not on the receptacle.—The ſituation, and not the number of the ſtamens is here to be attended to.—The calyx alſo is monophyllous and concave in this claſs; and the claws of the petals are fixed into the inſide of the calyx.

IMBERBIS *corolla*. A beardleſs corolla. Applied to ſome ſorts of Iris, in oppoſition to other ſorts, which have a bearded corolla (*barbata*). This beard is the nectary.

IMBRICATE. *Imbricātus.* Lying over each other, like tiles on a roof. Applied to leaves and their ſerratures, in the bud; or, a term in foliation—to the ſtem, when covered with ſcales: *tectus, ut nudus non appareat*—to the calyx, as in *Hieracium*, *Sonchus*, and other *Syngeneſia*—to the ſpike, having flowers ſo cloſe as to preſs over each other.

IMMERSED leaf. *Submerſum folium.* Growing under water. See *Demerſe*.

Impari-pinnatum *folium*. An unequally-pinnate leaf; terminated by an odd or ſingle leaflet.

Imperfect flower. *Imperfectus flos*. Deſtitute either of the anther or ſtigma.—In Rivinus and ſome other authors it is ſynonymous with *apetalus* of Tournefort, *ſtamineus* of Ray, and *incompletus* of Vaillant.

Inæqualis *corolla*. An unequal corolla. Having the parts correſponding, not in ſize, but proportion. As in *Butomus*.

Inanis *truncus*. A pithy ſtem. *Interne medulla ſpongioſus*. Having a pith or ſpongy ſubſtance within. When quite empty it is called *fiſtuloſus*.

Incanus. Hoary; which ſee.—Linneus makes it ſynonymous with *tomentoſus*.—*Folia* (incana) *quæ colorem glaucum habent & fere argenteum, quod ex ſuperficie ſingulari oritur*. Philoſ. Bot. —219.

Incisum ſ. *diſſectum folium*. Gaſhed; which ſee. *Inciſo-crenatum*. Gaſh-crenate, or deeply cut; as in *Geranium Reichardi*.—*Inciſo-denticulatum*. Gaſh-toothletted. — *Inciſo-multifidum*. Gaſh-multifid. — *Inciſo-ſerratum*. — Gaſh-ſerrate. Theſe compound words ſound well in Latin.

Perfons who think them harfh in Englifh, muft ufe the periphrafes.

INCLUDENS calyx. An including or inclofing calyx. Shutting up and concealing the corolla. As in *Phalaris*.—*Includens fomnus*. When alternate leaves approximate to the ftalk during the night, fo that the flower or tender twig is protected between them.

INCLUSA *anthera*. Inclofed within the corolla: as in fome forts of *Erica*. Oppofed to *exferta*.

INCOMPLETUS *flos*. Qui caret perianthio aut corolla.—An incomplete flower is deftitute either of the perianth or corolla.—In *Delin. pl.* it is made fynonymous with *apetalous*, as it is alfo by Vaillant. See *Imperfect*. Every apetalous flower is incomplete; but every incomplete flower is not apetalous. An imperfect flower wants one or both the effential parts; an incomplete flower wants one or both the covers.

INCRASSATUS *pedunculus*. A peduncle incraffated, thickening or becoming thicker towards the flower. As in *Cotula*, *Tragopogon*, and moft cernuous flowers. Oppofed to *attenuatus*. It is applied alfo to the fcape.

INCUMBENT. *Incumbens.* Leaning upon, or resting against. Applied to the ſtamens in the claſs *Diadelphia*—to anthers, which reſt upon the filament: oppoſed to upright, *erecta*—to the diviſions of leaves which lie one over another.

INCURVATUS *caulis.* An incurved ſtem. *Introrſum nutans.* Delin. pl. bowed or curved inwards—*incurvum folium; dum ſurſum arcuatur verſus caulem;* bowed or curved upwards towards the ſtem. Made to be ſynonymous with *inflexum* in Philoſ. bot.—*aculeus incurvus; introrſum flexus;* a prickle, bowed or bent inwards. The terms for angular and curvi-linear bendings ought to be diſtinct; I uſually apply *bent* to the firſt, and *bowed* or *curved* to the ſecond.

INDIVISUM *folium.* An undivided leaf; in oppoſition to *fiſſum*, cloven. See *Integer*.

INERME *folium.* An unarmed leaf; without thorns or prickles. Oppoſed in *Philoſ. bot.* p. 44, to *ſpinoſum*; in 233, to *pungens*.

INFERUM *perianthium.* An inferior perianth. Incloſing the germ; or, having the germ above the receptacle: oppoſed to *ſuperum*.—*Inferum*

germen.

germen. An inferior germ. Placed below the corolla.—An inferior perianth is the ſame with a ſuperior germ; and a ſuperior perianth is the ſame with an inferior germ.—This happy diſtinction was originally Tournefort's: but his expreſſion of *calyx abit in fructum*, and *piſtillum abit in fructum*, was by no means ſo clear as Linneus's *germen ſuperum* and *inferum*. To underſtand the difference, we muſt obſerve the *ſituation* of the perianth or germ with reſpect to the receptacle. — This diſtinction might be exemplified in innumerable inſtances: the inferior flower or perianth, and the ſuperior fruit or germ, are in no plants more evident than in Cucumber, Melon, Gourd, Bryony and others of the claſs *Monoecia*, and the order *Syngeneſia*.

INFLATUS. Inflated. Hollow and puffed or blown up like a bladder. Applied to the perianth, as in *Phyſalis*—to the corolla, as in *Calceolaria*—to the nectary, as in *Cypripedium*—to the pericarp, as in *Fumaria cirrhoſa*, and *Colutea*.

INFLEXUS. Inflex or Inflected. Bent upwards, at the end, towards the ſtem. Applied to the leaf; and alſo to the calyx, when it means only bent inwards. See *Incurvatus*.

INFLO-

INFLORESCENTIA. Inflorefcence, or manner of flowering. *Modus quo flores pedunculo plantæ annectuntur.* The various modes in which flowers are faftened to the plant by means of the peduncle. Thefe are — 1. *Spadix.* 2. *Cyme.* 3. *Umbel.* 4. *Spike.* 5. *Ament.* 6. *Strobile.* 7. *Corymb.* 8. *Raceme.* 9. *Panicle.* 10. *Thyrfe.* 11. *Fafcicle.* 12. *Head.* (Capitulum). 13. *Whorl.* (Verticillus). Thefe are all explained in their proper places.

INFUNDIBULIFORMIS *corolla.* A funnel-fhaped corolla. *Monopetala, conica, tubo impofita.* Monopetalous; having a conical border, rifing from a tube. As in *Lithofpermum, Anchufa, Cynogloffum, Pulmonaria, Afperugo, Lycopfis, Tournefortia.*

INTEGER *calyx.* An entire calyx. Oppofed to fiffus.—Exemplified in *Genipa.*—*Integer caulis. Simpliciffimus, ramis vix ullis.* Philof. bot.—*Simpliciffimus, ramis anguftatis.* — Delin. pl. where *Simpliciffimus* is explained by *ramis vix ullis.*—In *Philof. bot. Integer* is a fpecies of the *Simplex*, which means, that the ftem is continued in one unbroken feries from top to bottom—that is, has no branches. How then comes *Integer*, Entire, to have fcarcely any branches?

branches? Should one not suppose that an *Entire* stalk was unbroken, as well as a *Simple* stalk? I confess my ignorance, in hopes of being better informed. — *Integrum folium.* An entire leaf. *Indivisum, sinu omni destitutum.* Undivided, having no sinus.

Integerrimum folium. A leaf quite or absolutely entire. *Cujus margo extimus integer absque omni crena est.* Philos. bot.—*Ipso margine lineari, nec minimum secto.* Delin. pl. Having the margin or edge entire, without any notches—or, without being in the least cut. *Integrum* therefore refers only to such sinuations as extend far into the disk of the leaf.

Interfoliacei *flores s. pedunculi.* Interfoliaceous flowers or peduncles.—*Inter folia opposita, sed alternatim collocati.* Between opposite leaves, but placed alternately: as in *Asclepias.* Contrasted with *oppositifolii.*

Internodium. The internode, or space between knot and knot, or joint and joint. In English we have no term appropriate to this idea, for which reason I have anglicized the Latin term. The joint is properly the articulation itself, from *junctura;* although in common language we use it also for the space between two joints.

Inter-

INTERRUPTA *fpica*. An interrupted or broken fpike. Divided by intervals of fmaller flowers. As in *Mentha fpicata*.

INTERRUPTE *pinnatum folium*. An interruptedly pinnate leaf. *Foliolis alternis minoribus*. Having fmaller leaflets between each pair of larger ones.

INTORSIO. *Flexio partium verfus alterum latus*. Philof. bot.—In *Delin. pl.* it is called *Torfio*, and is thus explained. *Directio plantæ in unam alteramve plagam a verticali diverfam*.—The writhing, bending, turning, twining or twifting of any part in a vegetable towards one fide or other—or, in any direction from the vertical. Thus the ftem in fome plants twines from right to left; as in *Tamus*, *Diofcorea*, *Rajania*, *Menifpermum*, *Ciffampelos*, *Hippocratea*, *Lonicera*, *Humulus*, *Helxine*.—In others from left and right; as in *Phafeolus*, *Dolichos*, *Clitoria*, *Glycine*, *Securidaca*, *Convolvulus*, *Ipomea*, *Cynanche*, *Periploca*, *Ceropegia*, *Euphorbia*, *Tragia*, *Bafella*, *Eupatorium*, *Tournefortia*. It is alfo applied to the Clafper or Tendril; as in Leguminous plants, *Vine*, *Bryony*. In this laft it is obferved by Grew, that the tendril having made two or three turns one way, is then directed the contrary way, in order to be more

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ſure of its hold. To the corolla, which twiſts to the left in *Aſclepias*, *Nerium*, *Vinca*, *Rauwolfia*, *Periploca*, *Stapelia*—to the right in *Pedicularis*, *Trientalis*, *Gentiana*.—It is applied alſo to the Piſtil and Germ—to the Spike—to the Awn, as in the *Wild Oat*—to the beak of the Seed, as in *Geranium*—to the peduncle, as in *Mnium hygrometricum*. — When we ſpeak of right and left, we ſuppoſe the ſpectator to have his face turned towards the ſouth. See *Twining*.

INTORTUS *ſtylus*. A ſtyle twiſted inwards.

INTRAFOLIACEÆ *ſtipulæ*. Intrafoliaceous ſtipules. Growing above or within the leaves.

INVERTENS *ſomnus*. When during the night the more tender ſurface of the leaves is protected, by being inverted.

INUNDATÆ. The name of the forty-fifth order in Linneus's fragments of a natural method; and the fifteenth of the natural orders in *Gen. pl.*—Containing ſuch plants as grow naturally in the water.

INVOLUCRUM. An involucre (from *involvo*, to wrap up). *Calyx (umbellæ) a flore remotus*. A calyx remote

remote from the flower, particularly in the umbel, but applied alſo to the whorl and other kinds of infloreſcence.

Involucrum univerſale. A univerſal involucre; placed at the origin of the univerſal umbel.—*Partiale.* A partial involucre; at the origin of the partial umbel.—*Proprium*, a proper involucre; placed beneath a ſingle flower.

Involucres are *one-leafed*, &c. or *many-leaved* according to the numbers of leaves of which they are compoſed. *Involucrum monophyllum*, &c. *polyphyllum.*

Involucrum dimidiatum. A dimidiate or halved involucre. *Ab altero latere deficiens*; deficient on one ſide.

Involucratus. Involucred. Having an involucre. As umbels, whorls, &c.

Involucellum. An Involucret. A little or partial involucre. As in Umbellate plants and *Euphorbia.*

Involvens *ſomnus.* When the leaflets of compound leaves, during the night, approach by their tips only, making an arch or hollow underneath.

INVOLUTA *foliatio* f. vernatio. Involuted foliation or vernation. *Quum margines laterales (foliorum in gemma) utrinque introrfum fpiraliter involvuntur.* Philof. bot. *Foliorum lateribus utrinque fpiraliter contortis verfus fuperiorem paginam.* Delin. pl. When leaves within the bud have their edges rolled fpirally inwards on both fides towards the upper furface. As in *Lonicera*, *Eunonymus*, *Pyrus*, *Populus*, *Viola*, &c.

JOINT. *Articulus.*

JOINTED. *Articulatus.* Applied to the root, in *Lathræa*, *Oxalis*, *Martynia*, *Dentaria*—to the ftem or culm, in corn and graffes—to the leaves, when one leaflet grows from the top of another —to the fpike, peduncle, petiole, capfule, filique and legume.

IRREGULARIS *corolla.* An irregular corolla. *Quæ limbi partibus, figura, magnitudine, aut proportione diverfa eft.* Philof. bot. In Delin. pl. we read *et* proportione. Different in the figure, fize, or proportion of the parts of the border. I prefer the disjunctive, becaufe a diverfity in any of the above-recited circumftances is fufficient to produce an irregularity. —The term is originally Rivinus's, whofe arrangement is founded on the regularity or irregularity

gularity of the corolla. Jungius expreſſed the idea by the term *difformis*—Ray, Tournefort and others by *Anomalus (flos)*.—Dr. Berkenhout's explanation gives Jungius's idea.—An irregular flower is that whoſe parts want uniformity.

JUGUM. A yoke, couple, or pair of leaflets.—Hence *folium conjugatum*, a leaf paired or having one pair of leaflets, of which there are many inſtances in the claſs *Diadelphia*.

JULUS. A Catkin or Ament. For this term of Tournefort's and others, Linneus ſubſtituted *Amentum*. Hence Herman and others had a claſs of trees entitled *Juliferæ*.

K

KEEL. *Carina*. The lower petal of a papilionaceous corolla, incloſing the ſtamens and piſtil: uſually ſhaped like a boat.

Keeled. Carinatus. Having a longitudinal prominency upon the back. Applied to the leaf, calyx and nectary.

Kidney-shaped leaf. *Folium reniforme.* Roundiſh, and hollowed at the baſe without angles. Applied alſo to the anther and ſeed, which being ſolid bodies, have really the form of a kidney; whereas a leaf being a plane ſurface, reſembles the ſection of a kidney. This diſtinction is to be obſerved in ſeveral other caſes.

Knot. *Nodus.* A protuberant joint in the ſtem of ſome plants, particularly in corn and graſſes. An admirable proviſion to ſtrengthen their otherwiſe weak hollow culms.

Knotted or knotty. *Nodoſus.* Having knots or ſwelling joints.—The terms *Articulatus*, *Geniculatus*, and *Nodoſus*, do not ſeem to be well diſtinguiſhed by Linneus. The firſt appears to me to mean *jointed* in general; the laſt—jointed with a ſwelling or protuberance. The difference between this and the ſecond has been already explained under *Geniculatus*.

Knotless. *Enodis.* Without knots. *Continuus abſque articulis.* Applied to a ſtem.

L

L

LABIATUS *flos*. A Labiate or lipped flower. This is a term of Tournefort's. Linneus uſes the term *Ringens*, including under it both Labiate and Perſonate flowers. In Delin. pl. *Ringens* (corolla) is made ſynonymous with *Labiate*. This term is applied likewiſe to the calyx. See *Ringens* and *Perſonata*.

The confuſion would be cleared up, if we might be allowed to put *Labiate*, for an irregular monopetalous corolla, with two lips; and to appropriate the term *Ringent*, to ſuch as have the lips gaping or open—*Perſonate*, to ſuch as have them cloſed.

Labium, the lip, is uſually applied by Linneus to both lips of a labiate corolla, with the diſtinction of ſuperior and inferior. But it is ſometimes uſed for the lower lip in oppoſition to the upper lip, which is then called *Galea*, the helmet.

LACERA *corolla*. A lacerated corolla. *Cujus limbus tenuiſſime diſſectus eſt*. Having the border very finely cut.

Lacerum folium. A lacerated leaf. *Quod margine varie sectum est segmentis difformibus.* Having the edge variously cut into irregular segments—as if it were rent or torn.

Lacinia *corollæ.* *Quævis pars in quam limbus corollæ monopetalæ dissectus est.* Any part into which the border of a monopetalous corolla is cut. It is applied also to monophyllous calyxes: and a calyx which has two *laciniæ* is said to be *bifidus*, &c. Philos. bot. p. 63.

Laciniatus. Jagged. Folium laciniatum. *Varie sectum in partes, partibus itidem indeterminate subdivisis.* This implies an irregularity in the division and subdivision, whereas *lacinia* is the same with a part, segment or cleft; as Linneus has explained it.

Laciniatus flos, is a term of Tournefort's, for which Linneus puts *multifida corolla.*

Lacinŭla. Dimin. from *Lacinia.* A little jag, or subdivision of the larger one.

Lactescentia. Lactescence or Milkiness. *Copia liquoris, qui effluit læsa planta.* The liquor which flows abundantly from a plant, upon its being wounded. It has the name from the

 juice

juice being commonly white, like milk: as in *Euphorbia*, *Papaver*, *Asclepias*, &c. *Campanula*, &c. and many of the plants in the first division of the class *Syngenesia*.—It is however yellow in *Chelidonium*, *Bocconia*, *Sanguinaria*, *Cambogia*: and red in *Rumex sanguineus*.

LACUNOSUM *folium*. A lacunose or pitted leaf. *Disco depresso inter venas interjectas*. When the disk is depressed between the veins. Contrary to *rugosum*, wrinkled, in which it rises.

LÆVIS. Even, very smooth, polished. This term does not occur in *Philosophia Botanica*. In *Delin. pl.* it is applied to the stem, and is explained to be *superficie æquali*. Having an even surface. Opposed to *striatus* and *sulcatus*, streaked and furrowed or grooved. Whereas *glaber*, smooth, is opposed to *asper*, *scaber*, &c. rough and rugged.—The *Even* stem is exemplified in *Chelidonium hybridum*.

In leaves it is commonly used in opposition to *rugosum*, &c. and therefore means an even level surface: as in *Statice Limonium*. And yet in *Crotalaria incanescens*, Lin. suppl. 323. *Lævis* is opposed to *albo-tomentosus*. In *Ethulia divaricata*, it is opposed to *pubescens*. And in Philos. bot. *Glaber* is interpreted to be, *superficie* *lævi*.

Levi. The French translate it *lisse*. There is classical authority for *lævis* being not only *planus*, *politus*, *tactu non asperus*, as *læve clypeum*; but also *glaber*, *depilatus*. Pers. sat. 1. & Virg. ecl. 6, &c.

Lamella. A thin plate. Applied to the plates of which the under part in some Funguses is composed: hence these are called *lamellated* or *lamellous* Funguses. *Gills* is the common English name for *lamellæ*.

Lamina. The border. *Corollæ polypetalæ pars superior patula.* The upper, broad or spreading part of the petal, in a polypetalous corolla. Called *limbus*, in a monopetalous corolla.

Lana. Wool. *Pili curvi densi.* Delin. pl.—*servans plantas ab æstu nimio.* Philos. bot. Crooked or curling, close, thick hairs: the principal use of which is to defend plants against too great a degree of heat.—As in *Salvia canariensis*, and *Æthiopis*. *Sideritis canariensis*. *Marrubium*. *Verbascum*. *Stachys*. *Carduus eriocephalus*. *Onopordum*. See *Wool*.

Lanatus. Woolly. Applied to the stem; as in *Stachys germanica*, &c.—*Lanatum folium.* A woolly leaf. *Quasi tela araneæ indutum*—to which

which is added in Delin. pl.—*pilis ſponte curvatis.* With a covering reſembling a ſpider's web, compoſed of hairs curling ſpontaneouſly: as in *Salvia* and *Sideritis.*

Sublanatus. Somewhat woolly.

LANCEOLATUM *folium.* A lanceolate leaf. *Oblongum utrinque ſenſim verſus extremitatem attenuatum.* Oblong, and gradually tapering towards each extremity: like the head of a lance. —Exemplified in *Plantago lanceolata.*—Some call it ſpear-ſhaped, others lance-ſhaped or lanced; but *Lanceolate* appears to me in all reſpects preferable.—It is applied alſo to the *Stipule*, *Bracte*, and *Perianth.*

Lanceolato-ovatum folium. A lanceolate-ovate leaf; partaking of both forms, or between both; but inclining more to the latter. An *Ovate-lanceolate* leaf, on the contrary, would incline more to the lanceolate. This is a general rule with reſpect to theſe compound words.

LANUGO. Down. *Pili molles plantarum partes veſtientes.* Soft hairs clothing the parts of plants.

LATERIFOLIUS *flos* ſ. *pedunculus.* *Ad latus baſeos folii.* By the ſide of the baſe of the leaf. As in *Claytonia*, *Solanum*, *Aſperifoliæ.*

LATTICED. *Cancellatus.* Applied to the involucre in *Atractylis cancellata.* And to the capsule of the Lily.

LAXUS, in Philos. bot. synonymous with *flaccidus*, and opposed to *strictus.*—*Libere in arcum flexibilis.* Delin. pl.—A lax, loose, flaccid, or flexible stem. Easily bent, in opposition to stiff. —It is applied also to the glume.

LEAF. *Folium.* The organ of motion in a vegetable. Transpiring and attracting air and moisture, as the lungs do in animals; and affording shade to the vegetable. In reality, however, leaves are rather analogous to the muscles, although they be not as in them fixed by a tail, because in vegetables there is no voluntary motion. Leaves are either 1. *Simple*, having one leaf only on a petiole, or proceeding from the same point — or 2. *Compound*, having several leaves to one petiole: the component leaves are called

LEAFLETS. *Foliola.* Others call them *Leafits.* But I follow the analogy of the language in forming diminutives. For the same reason, if we use *leaf*, we must not use *foliole.*

Leafless. *Aphyllus.* Deſtitute of leaves. Applied to the ſtem and branches.

Leafy. *Foliatus.* Furniſhed with leaves: in oppoſition to *leafleſs.*—Or abounding in leaves, contraſted with ſuch ſtems as have few.—It is applied not only to the ſtem, but to the head, ſpike, raceme and peduncle.

Legumen. A Legume. *Pericarpium bivalve, affigens ſemina ſecundum ſuturam alteram tantum.*—A pericarp of two valves, in which the ſeeds are fixed along one ſuture only. It is uſually of a membranaceous texture, and commonly one-celled. Some legumes however are two-celled—others jointed—others again divided tranſverſely into ſeveral cells (*iſthmis intercepta*), by contracting between the ſeeds.—The old Engliſh word was *Cod;* and the Legume of a Pea is ſtill called a *Peas-cod.*—Pod is uſed both for the legume and ſilique indifferently: but they are ſo diſtinct that they ought not to have the ſame appellation. It ſeems better, therefore, to anglicize the Latin terms: and with reſpect to this, it is become ſufficiently familiar to the Engliſh ear.

Leguminosæ. Leguminous plants. Such as have a legume for the pericarp. The ſame with

with the *Papilionacei* of Tournefort. It is one of Ray's claſſes. The order *Decandria* of the claſs *Diadelphia* in Linneus's ſyſtem, contains theſe plants.

LENTICULARIS *ſcabrities* (from *Lens*, a lentil). A ſort of ſmall glandular roughneſs, reſembling ſmall lentils, on the ſurface of ſome plants. See *Scabrities*. Applied alſo to the capſule, in *Allamanda*, and then alluding merely to the ſhape.

Level-topped. See *Faſtigiate*.

LIBER. (According to Scaliger, *quaſi luber*, *quia de arbore reluatur*, ſ. *reſolvatur*, or to uſe Cato's word *glubatur*. As from *creſco* comes *creber*; from *facio*, *faber*; from *ſuo*, *ſuber*; ſo from *luo* comes *luber*, and thence *liber*.—But a more probable derivation is from the Æolic λεπορ for λεπος, which by changing π into ϐ became λεϐηρις.) —*Tegmentum tertium membranaceum ſuccidum flexile*. The inner bark of a vegetable; or the third integument, membranaceous, juicy and flexible. The wood is gradually formed from this; and according to Linneus, the corolla is a continuation of it. See *Subſtance*.

LIGNOSUS *caulis*. A woody ſtem. Oppoſed to herbaceous.

LIGNUM. The wood, or woody part of the trunk. —*Liber præcedentis anni, nunc exsuccus, induratus, agglutinatus.* The *liber*, or inner bark of the preceding year, deprived of its juice, hardened, and glued faſt together.

LIGULATUS (from *ligula*, a ſtrap; which ſome derive from *ligo*, to bind; others from *lingula* dimin. of *lingua*, a tongue; the firſt from its office, the ſecond from its ſhape) *flos. Ligulata corolla.* A ligulate or ſtrap-ſhaped flower. A ſpecies of Compound flower, in which the florets have their corollets flat, ſpreading out towards the end, with the baſe only tubular. *Cum corollulæ floſculorum omnes planæ, verſus exterius latus expanſæ ſunt.* Theſe are the *Semifloſculoſi* or Semifloſcular flowers of Tournefort; and are compriſed in the firſt diviſion of the firſt order of Linneus's nineteenth claſs, *Syngeneſia Polygamia Æqualis.*

LILIA. The name of the third nation, tribe, or caſt of vegetables, in Linneus's *Regnum Vegetabile*, containing the Patrician rank, eminent for their ſplendid flowers.

Liliacea corolla. A liliaceous corolla; having ſix regular petals.

Liliaceæ. Liliaceous or Lily-like plants. The name

name of one of Tournefort's claſſes. Alſo of the tenth order in Linneus's fragments of a natural method. They are divided among ſeveral (9—11) orders, in the *Ordines naturales*, at the end of Linneus's *Genera Plantarum*.— This fine natural claſs is to be found in the claſs *Hexandria* of Linneus's artificial ſyſtem.

Limbus. The border or upper dilated part of a monopetalous corolla. Since we have only the word *border* in Engliſh, to expreſs the upper ſpreading part, both in this, and the polypetalous corolla, it would perhaps be better to preſerve the Latin terms *limbus* for the firſt and *lamina* for the ſecond. For *limb* applied to border we have the authority of the aſtronomers.

Linea or line. The twelfth part of a Paris inch. The breadth of the creſcent at the root of the finger nail. See *Meaſures*.

Lineare *folium*. A linear leaf. *Æquali ubique latitudine, interdum utraque extremitate tantum anguſtatur.* Of the ſame breadth throughout, except ſometimes at one or both ends. As in Graſſes, Roſemary, &c.— Applied alſo to the *petiole, involucre, perianth, petals, ſpike,* &c.

Lineari-

Leari-cuneiforme. Linear-wedged-ſhaped. Between both, but inclining more to the latter.

Lineari-lanceolatum. Linear-lanceolate.

Lineari-ſubulatum. Linear-ſubulate.

Lineatum *folium.* A lineate leaf. *Nervis depreſſis.* The ſurface ſlightly marked longitudinally with depreſſed parallel lines. *Lined* is improper, as being uſed in a different ſenſe.—This term has been ſometimes confounded with *linear,* which reſpects the form of the leaf. The terms being ſo alike, and this occurring ſeldom, it may perhaps be better to write—a leaf marked with lines.

Linguiforme, ſ. *lingulatum folium.* A tongue-ſhaped leaf. Linear and fleſhy, blunt at the end, convex underneath, and having uſually a cartilaginous border, as in *Meſembryanthemum, Aloe, Hæmanthus coccineus.*

Lingulatus flos. A term of Pontedera's. The ſame with *ligulatus;* which ſee.

Lip. See *Labium.*

Lobus. A lobe. The part into which ſome ſimple leaves are divided.—Alſo the *placenta,* or

or main body of the feed deftined to nourifh the heart, fplitting ufually in two; thefe parts are called the lobes. See *Cotyledon*.

LOBATUM *folium*. A lobate or lobed leaf. *Divifum ad medium in partes diftantes, marginibus convexis.* Divided to the middle into parts diftant from each other, with convex margins. — The latter claufe is omitted in *Delin. pl.* and yet it feems neceffary to diftinguifh this from *folium fiffum*, the cleft or cloven leaf. — Thefe leaves take the names of *bilobate*, *trilobate*, &c. or *two-lobed*, *three-lobed*, &c. from the number of lobes into which they are divided.

LOCULAMENTUM pericarpii. The cell of a pericarp or fruit. *Concameratio vacua pro feminum loco.—Pericarpium uniloculare, biloculare*, &c. A unilocular or one-celled; a bilocular or two-celled pericarp. If any one fhould diflike thefe compound words, he may write — a pericarp of one cell — of two cells, &c. And this may ferve as a general rule in the like cafes.

Locŭlus. The little cell of an anther, containing the pollen. *Loculi—divifiones laterales, tunicis factæ.*

Lomentaceæ. (*Lomentum*, a ſort of colour in Pliny, a *lotu*, being made by waſhing. But it alſo ſignifies *farina fricta*, parched meal, or according to others, *farina fabacea*, bean meal.) The name of the fifty-ſixth order in Linneus's fragments; and of the thirty-third in his *Ordines Naturales*.

Loose. *Laxus*. Which ſee.

Lucidum *folium*. *Quaſi illuminatum*. Delin. pl. —Bright, ſhining, as it were illuminated. See *Nitidum*. — Dr. Berkenhout underſtands it to mean *clear*, *tranſparent*.

Lunulatum folium. *Subrotundum, baſi excavatum, angulis poſticis notatum*. Philoſ. bot.—In Delin. pl. it is called *Lunatum*, and the explanation is ſomewhat differently worded—*ſubrotundum, baſi ſinu diviſum, angulis poſticis acutis*.—It is ſingular that Dr. Berkenhout, who ſeldom gives any equivalent Engliſh terms, ſhould tranſlate *lunatum*, moon-ſhaped; and *lunula*, a half-moon; though he explains it, rightly enough — ſhaped like a ſmall creſcent. In which ſenſe only it is uſed in botany; though among the ancients *lunatus* is put for the ſhape of the moon, both when full and in a creſcent.

Lunulata is applied to the keel of the flower in *Polygala myrtifolia*. Alſo to the ſtipule and ſpike.—See *Creſcent-ſhaped*.

Luridæ (*Luridus*, a duſky or livid colour. Linneus makes it ſynonymous with *fuſcus*). The name of the thirty-third order in Linneus's fragments, and of the twenty-eighth in his *Ordines Naturales*.

Luxurians flos. A luxuriant flower. *Tegmenta fructificationis ita multiplicat, ut eſſentiales ejuſdem partes deſtruantur.* Multiplies the covers of the fructification ſo as to deſtroy the eſſential parts. —Luxuriancy is either *Multiplicate*, *Full* or *Proliferous*. All Luxuriant flowers are *Monſters*; but *full* flowers only (Pleni) are abſolutely barren.

Lyratum *folium*. A Lyrate or Lyre-ſhaped leaf. *Tranſverſim diviſum in lacinias, quarum inferiores minores remotiores.* — Divided tranſverſely into ſeveral jags, the lower ones ſmaller and more remote from each other than the upper ones. As in *Geum urbanum*.—This is one of the Compound leaves, and yet the figure (n. 76.) to which Linneus refers, is a ſimple leaf, not at all like that of *Geum urbanum*.

MALE

M

MALE flower. *Mafculus flos.* Bearing ftamens only, without piftils; or at leaft wanting the ftigma.

Male plant. *Planta Mas.* Producing only male flowers. Otherwife called barren or abortive.

Many-cleft or Multifid leaf. See *Cleft* and *Fiffum.* —It is applied alfo to the Corolla.

Many-flowered glume and perianth. *Gluma multiflora. Perianthium multiflorum.* Inclofing feveral flowers. — Many-flowered peduncle and ftem. *Pedunculus & caulis multiflorus.* Supporting feveral flowers.

Many-leaved calyx or tendril. *Polyphyllus.*

Many-parted leaf. *Folium multipartitum.* See *Partitum, Parted.*

Many-petalled corolla. *Polypetala.* Oppofed by Linneus to a monopetalous or one-petalled corolla. Other writers have commonly given feparate names to the corolla, according to the number

number of petals, as far as six; calling the rest polypetalous. Linneus also makes the distinction of *dipetalous*, *tripetalous*, &c. but calls them all polypetalous.

Many-valved glume. *Multivalvis*. Consisting of more than two valves, which is the common number.

MARCESCENS. Withering, Shrivelling. *Contabescit nec decidit*. Decaying without falling off. Applied to the perianth, in the class *Diadelphia*: and to the corolla, in *Campanula*, *Orchis*, *Cucumis*, *Cucurbita*, *Bryonia*, &c.

MARROW. *Medulla*. The pith of a vegetable. The inner vesicular substance, or that which clothes the inner surface of a hollow trunk.

MASKED corolla. See *Personata*.

MEASURES. Linneus seldom makes use of any other measure besides the proportion between the parts. Since plants vary exceedingly in the size both of the whole and all the parts, he has discarded geometrical measures, and has adopted others taken principally from the human hand and arm..

1. *Capillus*. A Hair. The diameter of a hair. *One-twelfth of a Line.*

2. *Linea.* A Line. The length of the little crefcent at the root of the finger nail. *One-twelfth of an Inch.*

3. *Unguis.* A Nail. The length of a nail. *Half an Inch.*

4. *Pollex.* An Inch. The length of the firft joint of the thumb.

5. *Palmus.* A Palm, or hand. The breadth of the four fingers. *Three Inches.*

6. *Spithama.* A fhort Span. The fpace between the end of the thumb and of the fore-finger extended.—*Seven Inches.*

7. *Dodrans.* A long Span. The fpace between the end of the thumb and of the little finger extended.—*Nine Inches.*

8. *Pes.* A Foot. From the bend of the elbow to the bafe of the thumb.—*Twelve Inches.*

9. *Cubitus.* A Cubit. From the bend of the elbow to the end of the middle finger.—*Seventeen* (Paris) *Inches:* or *fomething more than eighteen inches Englifh.*

10. *Brachium.* An Arm. From the arm-pit to the end of the middle finger.—*Twenty-four Inches.*

11. *Orgya.*

11. *Orgya.* A Fathom. The height of a man, or the ſpace between the ends of the fingers when the arms are extended.

Obſerve *that the above geometrical meaſures follow the French ſtandard; and that the Engliſh foot* is eleven inches and a quarter French, nearly. *Our hand is the breadth of the palm, or about four inches. And the Roman palm is* 8,78 *for architecture, and* 9,79 *in buying goods; Engliſh meaſure.*

MEDIOCRIS. Of a middling length. Applied to a petiole, that is of the ſame length with the leaf. When it is ſhorter than the leaf, it is ſaid to be *brevis*, ſhort; when it ſurpaſſes the length of the leaf, it is called *longus*, long.

MEDULLA. Marrow or Pith. *Subſtantia intima veſiculoſa, internumve parietem trunci cavi obducens.* Regn. veget. — *Creſcit extendendo ſe & integumenta.* — *Fibræ medullaris extremitas per corticem protenſa ſolvitur in gemmam imbricatam ex foliolis nunquam renaſcituris.* Philoſ. bot. See *Marrow.*

MEMBRANACEUS. The ſubſtance of parchment. *Membranacea ſtipula.* A membranaceous ſti-

 pule;

pule; as in *Arenaria rubra*.—*Membranacea valvula*.—*Membranaceus calyx*—*petiolus, complanatus more folii*; flatted, like the leaf itfelf.—*Membranaceum folium*; a membranaceous leaf. *Quod inter utramqae fuperficiem nulla evidenti pulpa fcatet*. Having no diftinguifhable pulp between the two furfaces.

Membranatus caulis. A membraned ftem. *Complanatus more folii*. Flattened like a leaf.

Mensura. See *Meafures*.

Meteoricæ *vigiliæ*. When flowers open and fhut according to the temperature of the air. See *Vigiliæ*.

Mid-rib. The main nerve or middle rib of the leaf, running from the bafe or petiole to the apex, and from which the veins of the leaf ufually arife and fpread. See *Rachis*.

Monadelphia. (Μονος and αδελφος, *one brotherhood.*) The name of the fixteenth clafs in the Linnean fyftem. Comprehending thofe plants which have hermaphrodite flowers, with one fet of united ftamens. They form a natural clafs, entitled *Columniferæ*.

Monandria. The name of the firft clafs in the Linnean fyftem, comprehending thofe plants which

which have only one ſtamen in a hermaphrodite flower.

Monocotyledones *plantæ.* Plants which have only one cotyledon or lobe in the ſeed; as *Graſſes*, *Palms*, and *Liliaceous plants*. Linneus remarks that theſe are more properly *Acotyledonous*, ſince the cotyledon continues within the ſeed.

Monoecia. (Μονος and οικος, *a houſe.*) The name of the twenty-firſt claſs in the Linnean ſyſtem; comprehending the androgynous plants, or ſuch as produce male and female flowers, on the ſame individual, without any mixture of hermaphrodites.

Monogynia. The name of the firſt order, in each of the thirteen firſt claſſes of the Linnean ſyſtem. Comprehending ſuch plants as have one piſtil, or ſtigma only, in a flower.

Monopetala *corolla.* A monopetalous or one-petalled corolla. The whole in one petal. It may be cut deeply, but is not ſeparated at the baſe. Exemplified in *Convolvulus*, *Primula*, &c.

The moſt remarkable forms of the monopetalous corolla are the *Bell-ſhaped*, *Funnel-ſhaped*, *Salver-ſhaped*, *Wheel-ſhaped*, and *Labiate*.

MONOPHYLLUM (μονος and φυλλον, *a leaf*) *perianthium*. A monophyllous or one-leafed perianth. All in one; if cut, not feparated to the bafe. As in *Datura*, *Primula*. Applied alfo to the Involucre.

MONOSPERMA *planta*. A plant that has one feed to each flower. As in *Polygonum*, and *Collinfonia*. A monofpermous or one-feeded plant.—*Monofperma bacca*. A one-feeded berry; called *monopyrena* by the older botanical writers.

MONOSTACHYOS (μονος and σταχυς, *a fpike*) *caulis*. A ftem bearing a fingle fpike.

Moon-fhaped. See *Lunulatum* and *Crefcent-fhaped*.

Moffes. See Mufci.

MOUTH. *Os*. The opening of the tube in the corolla.

MUCRO. (From μακρος, *long*, according to fome; from μικρος, *fmall*, according to others.) A dagger-point. Hence

Mucronatum folium. A dagger-pointed leaf. Terminating in a fharp point like a dagger; as in *Bromelia Ananas*. Applied alfo to the calyx.—The diminutive *mucronulatum* is fometimes ufed.

MULE

Mule plant. See *Hybrida.*

Multangularis f. *Polygonus caulis.* A multangular ftem. Having feveral corners.

Multicapsulare *Pericarpium.* A multicapfular pericarp; or, a fruit of many capfules. Having feveral pericarps fucceeding to a flower. As in *Caltha, Trollius, Helleborus.*

Multidentata *corolla.* A many-toothed corolla. *Cujus limbus aut petala margine diffecta funt.* Having the border (in a monopetalous corolla) or the petals (if it be polypetalous) cut about the edge.

Multifidum *folium.* A multifid or many-cleft leaf. Divided into feveral parts by linear finufes and ftraight margins. See *Fiffum* and *Cleft.*

Multifidus cirrus. A many-cleft tendril. *Multoties divifus.* Divided and fubdivided feveral times.

Multifida corolla. A many-cleft corolla. The fame with *laciniatus flos* of Tournefort. Exemplified in *Convolvulus Soldanella.*

Multiflorus. Many-flowered. Common to feveral flowers. — *Caulis.* A many-flowered

 ftem;

ftem; as in feveral fpecies of *Iris*, &c.—*Scapus*. A many-flowered fcape; as in *Primula officinalis*, *Auricula*, *Polyanthus*, &c.—*Calyx*; as in *Scabiofa*, and the clafs *Syngenefia*; when the component flowers are called *florets* or *flofcules*. —*Pedunculus*. A many-flowered peduncle; as in *Browallia elata*.

MULTILOCULARE *pericarpium*. A many-celled pericarp. Divided internally into feveral cells; as in *Nymphæa*.

MULTIPARTITA *corolla*. A many-parted corolla. *Multipartitum folium*. A many-parted leaf. Divided into feveral parts almoft to the bottom.

MULTIPLICATUS flos. A multiplied flower. A fort of Luxuriant flower, having the corolla multiplied fo far as to exclude only fome of the ftamens. —The perianth and involucre feldom, the ftamens fcarcely ever, conftitute a Multiplicate flower. It is called a *Double*, *Triple*, or *Quadruple* flower, according to the number of rows in the multiplied corolla: and a double flower is the loweft degree of it, or the firft effay towards fulnefs. — In common language we improperly call all thefe variations Double flowers.

Polype-

Polypetalous flowers are not unfrequently multiplied; as in *Ranunculus* and *Anemone*. Monopetalous flowers are very ſubject to this variety; but very ſeldom become full, or loſe all their ſtamens.

MULTISILIQUÆ. The name of the twenty-third order in the fragments of a natural method, in *Philoſ. bot.*; and of the twenty-ſixth in the *Ordines Naturales*, at the end of Linneus's *Genera Plantarum*. Comprehending thoſe plants which have ſeveral ſiliques or pods ſucceeding to each flower. As *Columbine*, *Hellebore*, &c.

MULTIVALVIS *gluma*. A multivalve or many-valved glume. Having more than two valves.

MUNIENS ſomnus. When the upper leaves of a plant, which during the day had ſpread out horizontally on long petioles, drop them at night, and hang down ſo as to form an arch all round about the ſtem.

MURICATUS. Muricated. *Punctis ſubulatis adſperſus*. Having ſubulate points ſcattered over it; or armed with ſharp prickles, like the *Murex* ſhell-fiſh.—Applied to the ſtem—to the calyx, as in *Crepis biennis*—to the pod, as in *Bunias*—to the ſeeds, as in *Caucalis*, *Ammi*.

Hence we have

MURICATÆ for the name of the eleventh order in Linneus's fragments of a natural method.

MUSCI. Moffes. The third of the Families, and the feventh of the Nations or Cafts, into which Linneus has diftributed all Vegetables. — The fixty-fifth order in his Fragments; and the fifty-fixth of his *Ordines Naturales.*—They form the fecond order of the clafs *Cryptogamia*, in his Artificial Syftem.

Hedwig has made confiderable difcoveries with refpect to the fructification of Moffes.

MUTICUS. — Awnlefs. — Oppofed to *ariftatus*, awned, in *Philof. botan.*—*Mutica gluma; acumine deftituta.* Without any point at the end. *Defin. pl.*—In this fenfe we have *Arifta mutica:* which can mean only blunt, or having no *acumen* or fharp point. This term is applied to the calyx in *Serratula;* and to the anthers in *Erica herbacea.*

MUTILATUS f. *Mutilus flos.* A mutilated flower. Not producing a corolla, when it ought regularly to do it. This defect is commonly owing to a want of fufficient heat, either from climate or fituation: fometimes it is the effect of culture.

NAKED.

N

NAKED. *Nudus.* When applied to the Stem or Trunk of a vegetable, it ſignifies, that it is without leaves, fulcres or arms. *Qui foliis, fulcris & armis caret.* Delin. pl.—In Philoſ. botan. it is ſaid only to be deſtitute of leaves, but that is expreſſed by the term *aphyllus*, leafleſs.—When applied to the Leaf, it ſignifies, that it is deſtitute of all pubeſcence. *Setis ac pilis deſtitutum:* Delin. pl. and is oppoſed to *tectum*, covered, in Philoſ. bot. p. 233.—When applied to the Flower, it implies, that the calyx is wanting; but it would be more properly called a naked flower, if the corolla were wanting as well as the calyx; however, it rarely happens that a flower is deſtitute of both. *Philoſ. bot.* p. 76.—When applied to the Receptacle, it means, that it is without hairs, briſtles or chaffs.—When applied to a Head of flowers *(Capitulum)*, it is oppoſed to *folioſum*, and implies that it has no leaves on it.—When applied to a Whorl *(Verticillus)*, the meaning is, that there is no involucre or leaves. In the ſame ſenſe it is applied to the Raceme, Petiole, Peduncle, &c.

NAP. *Tomentum.* Soft interwoven hairs ſcarcely diſcernible.

NAPPY or Tomentoſe. *Tomentōſus.* Covered with a whitiſh down, or with hairs interwoven and ſcarcely diſtinguiſhable. As the leaves of *Ceraſtium tomentoſum,* &c.

NATANS *folium.* A floating leaf. Placed on the ſurface of the water, in many aquatic plants; as *Nymphæa, Potamogeton.*

Nations. See *Gentes.* —The ſenſe in which the word *Caſt* is uſed in the Eaſt Indies, beſt expreſſes the idea which Linneus ſeems to have affixed to this word.

NATURAL CHARACTER of Vegetables, is that which delivers all poſſible certain characteriſtic marks of the fructification: and may therefore be uſed under any ſyſtem or arrangement.—Such characters are given by Linneus in his *Genera Plantarum;* from the number, figure, ſituation and proportion of the parts; rejecting taſte, ſmell, colour and ſize.

NATURAL CLASS. An aſſemblage of ſeveral genuſes of plants, agreeing in their parts of fructification, general appearance and qualities. We

have

have inſtances of ſuch in the *Umbellatæ*, *Verticillatæ*, *Siliquoſæ*, *Leguminoſæ*, *Compoſitæ*, *Gramina*, &c.

NAVICULARIS ſ. *Cymbiformis Valvula*. A boat-ſhaped valve. As in *Iſatis* and *Thlaſpi*.

NECESSARY Polygamy. *Polygamia Neceſſaria*. The name of the fourth order in the claſs *Syngeneſia*; wherein the hermaphrodite florets of the diſk, for want of a ſtigma, are barren; but the female florets of the ray, being impregnated by the pollen from the others, bear perfect ſeed.

NECK. *Collum*. The upper part of the tube in a corolla of one petal.

NECTARIUM. The Nectary, or melliferous part of a vegetable, peculiar to the flower. It commonly makes a part of the corolla, but is ſometimes entirely diſtinct from it, and is then called a *Proper* Nectary. It is frequently in form of a horn or ſpur: ſometimes it takes the ſhape of a cup, whence this part is named in Engliſh by ſome the *Honey-cup*.

NERVOSUM *folium*. A Nerved leaf. *Quum vaſa ſimpliciſſima abſque ramulis extenduntur a baſi verſus apicem*. Having veſſels perfectly ſimple and

and unbranched, extending from the baſe towards the tip. As in *Plantago lanceolata.*—It is applied alſo to the ſtipule.—Nervous has other appropriate ſenſes, and therefore to be avoided.

Nestling. *Nidŭlans.* Applied to ſeeds which lie looſe in pulp or cotton, within a berry or other pericarp.

Nitidum *folium.* Glittering, gloſſy. *Quod glabritie lucidum eſt* ſ. *glabritie lucente.* So ſmooth as to ſhine. Oppoſed to *Opaque.* Exemplified in *Ferula* and *Angelica canadenſis.*

Nodding. *Nutans.* When applied to a ſtem it is explained to mean, bent down outwards from the top:—when applied to a flower it ſignifies that the peduncle is conſiderably curved, but not ſo much as in the *flos cernuus;* which, as the term implies, points directly to the ground.

Nodus. See *Knot.* — Nodoſus caulis: *geniculis craſſioribus interceptus.* See *Knotted.*

Notched leaf. *Folium crenatum.* See *Crenate,* which is a better term.

Nucamentum; the ſame with *Amentum.* Hence *Nucamentaceæ,* the name of the ſeventeenth order

order in Linneus's fragments of a natural method.

NUCLEUS. A Kernel. The feed of a nut and of ftone fruits, contained within a fhell—*Putamen.*

Nudus. See *Naked.*

Nudiufculus. Almoft, or rather naked.

NUT. *Nux.* A feed covered with a fhell. Extending not only to Nuts, commonly fo called, but to the Acorn, and all Stone-fruits.

NUTANS. See *Nodding.*—*Nuto* properly fignifies to nod with the head, or to nod affent. Cicero ufes it for nodding to its fall, or being ruinous; alfo for hefitating or doubting in an opinion.

Nux. See *Nut.* — *Semen tectum epidermide offea.* Delin. pl.

O

OB in composition is put for *obverse*; as

OBCONICUM *Nectarium*. An inversely conical Nectary, such as we find in *Narcissus minor*.

OBCORDATUM *petalum*. An Obcordate or inversely heart-shaped petal: having the apex downwards. As in the class *Monadelphia*.—*Obcordatum legumen*; an inversely heart-shaped legume: as in *Polygala*.—*Obcordata siliqua*: an inversely heart-shaped silique: as in *Polygala*.

OBLIQUUM *folium*. An oblique leaf. *Basi cœlum, apice horizontem spectans*. Having the base directed towards the sky, and the apex or point towards the horizon. This sense of the word *oblique* respects the position of a leaf; and is exemplified in *Protea* and *Fritillaria*. But it is also used in another sense, which respects the shape of a leaf, when the surface is placed obliquely to the petiole, as in *Begonia*.

Obliquus caulis. An Oblique stem. *A perpendiculari horizontalive linea discedens*. Neither perpendicular nor horizontal. Respecting the general

general poſition of the ſtem with regard to the earth; or having a lateral direction without being bent.

OBLONGUM *folium.* An Oblong leaf.—*Cujus diameter longitudinalis aliquoties ſuperat tranſverſalem, & utraque extremitas ſegmento circuli anguſtior.* — Having its longitudinal diameter ſeveral times exceeding the tranſverſe one; rounded at both ends, but the curvature of each leſs than the ſegment of a circle.— Applied alſo to the ſpike and capſule.

Oblongiuſculus. Rather or ſomewhat oblong.

Oblongo-ovatum folium. An Oblong-ovate leaf. Between both, but inclining moſt to the latter.

OBOVATUM *folium.* An Obovate or inverſely ovate leaf. Having the narrow end downwards; or next the petiole, branch or ſtem.

OBSOLETUS. Worn out, ſcarcely diſtinguiſhable, very obſcure. *Obſolete lobatum, ſerratum,* &c. *Si non exacte lobatum, ſerratum,* &c. *eſt.* Obſoletely lobed or ſerrate: applied to leaves which are not quite regularly ſo; or in which the lobes or ſerratures are not very diſtinguiſhable; or ſeem as if almoſt gone or worn out.

OBTUSUM *folium*. An obtuſe or blunt leaf. Ending bluntly, but within the ſegment of a circle.—Applied to the perianth, in *Convolvulus* and *Melia*:—to the capſule, in *Rhinanthus*.

Obtuſiuſculus. Rather or ſomewhat obtuſe or blunt—bluntiſh.

OBVERSUM *folium* ſ. *verticale*. An obverſe or vertical leaf. *Cujus baſis anguſtior, ita ut baſis concipiatur ubi nunc apex*. Philoſ. Bot. p. 220.—Having the baſe narrower than the top, ſo that they ſeem to have changed places. See *Obcordatum* and *Obovatum*.

OBVOLUTA *foliatio*, ſ. *vernatio*. *Obvoluta folia*. Obvolute foliation, vernation or leaves. *Quum margines alterni comprehendunt oppoſiti folii marginem rectum*.—When (as the leaves lie in the bud) the margins alternately embrace the ſtraight margin of the oppoſite leaf.

OCTANDRIA (*οκτω* and *ανηρ*, *eight huſbands*). The name of the eighth claſs in the Linnean ſyſtem; comprehending thoſe plants which have hermaphrodite flowers with eight ſtamens.

OCTOFIDUS *calyx*. An eight-cleft calyx, as in *Tormentilla*. See *Cleft*.

OLERACEÆ.

OLERACEÆ. See *Holeraceæ*.

ONE-CELLED Capſule. *Capſula unilocularis*. As in *Primula*, *Trientalis*, &c.

ONE-FLOWERED Glume. *Gluma uniflora*. Including one flower only.—A one-flowered peduncle. *Pedunculus uniflorus*; ſuſtaining one flower.

ONE-LEAFED Calyx. *Monophyllus*. All of one piece.

ONE-PETALLED Corolla. *Monopetala*. All of one piece.

One-ranked. See *Secundus*.

ONE-SEEDED Berry. *Bacca monoſperma ſ. monopyrena*.

ONE-SIDED. *Unilateralis*. Applied to a raceme which has all the flowers inſerted on one ſide.

ONE-VALVED. *Univalvis*. Applied to the *Glume* in ſome Graſſes—to a Spathe opening on one ſide—to a Pericarp which has the outer ſhell undivided.

OPACUM *folium*. An opaque leaf. Dark-coloured; not reflecting light: in oppoſition to *Nitidum*, or *Lucidum*.

Operculum (*operio*, to cover). A lid or cover to a capſule: as in ſome *Moſſes*, and *Hyoſcyamus*.—Hence ſuch a capſule is ſaid to be *Operculata*, Operculate, Opercled, or covered with a lid.—Some uſe *Lidded*, which I cannot approve.

Opposita *folia*. Oppoſite leaves. Growing in pairs, each pair decuſſated, or croſſing that above and below it.—*Oppoſiti rami, pedunculi*. Oppoſite branches and peduncles.—Contraſted with *Alternate*.

Oppositifolius *pedunculus*. A peduncle placed oppoſite to the leaf. This term is applied alſo to Stipules.

Oppoſitè-pinnatum. Oppoſitely-pinnate. See *Pinnatum*.

Orbiculatum *folium*. An orbicular, or circular leaf.—*Cujus diameter longitudinalis & tranſverſalis æquales, peripheria circinata*. Having the periphery of a circle, or the longitudinal and tranſverſe diameters equal.—Applied to a ſeed which is flat, with a round margin; as in *Lens*—alſo to a globular ſpike.

Orchideæ. The name of the fourth order in Linneus's fragments; and of the ſeventh in his

his *Ordines naturales*; containing *Orchis* and other genera allied to it.

Ordo, an Order. A subdivision of a Class; or the second branch in a System. This subdivision is usually arbitrary; and is adopted principally, that too many genera may not occur at once to be distinguished. — In Linneus's system, the Orders of the first thirteen Classes are taken from the number of pistils in the flower. In the fourteenth and fifteenth, from the pericarp. In the sixteenth, seventeenth, eighteenth, twentieth, twenty-first and twenty-second from the number, &c. of stamens. In the nineteenth from the disposition and character of the florets.

Orgya. A Fathom. See *Measures*.

Os. See *Mouth*.

Ovale *folium*. An Oval leaf. *Cujus diameter longitudinalis superat transversalem, superiore & inferiore extremitate angustiore.* Philos. bot.— *Ex orbiculato oblongum, utraque extremitate rotundata æquali.* Delin. pl.—Having the longitudinal diameter longer than the transverse one, and the curvature the same at both ends. In *Philos. botan.* the Elliptic leaf is made synonymous

mous with this; but in *Delin. pl.* they are distinguished.—In truth, an *Oval* leaf has nearly the same proportion with the section of a hen's egg; although it has not the difference of curvature at the two extremities which that and the *Ovate* leaf have. Whereas an *Elliptic* leaf, as Botanists understand it, is much longer in proportion to its breadth, or more eccentric than the *Oval*.

OVARIUM (from *Ovum*, an Egg). The Ovary or germ; the embryo or rudiment of the fruit. See *Germen*.

OVATUM *folium*. An Ovate or Egg-shaped leaf. —*Cujus diameter longitudinalis superat transversalem, basi segmento circuli circumscripta, apice vero eodem angustiore.* The longitudinal diameter exceeding the transverse one; the base a segment of a circle; but narrower (or having a greater degree of curvature) at top.—The shape of this leaf is that of the longitudinal section of an egg. *Egged* sounds unpleasant to my ears. —It is frequently confounded, by careless writers, with the *Oval* leaf: which see.

Ovato-lanceolatum folium. An ovate-lanceolate leaf. Between these two forms, but inclining to the latter.

Ovato-oblongum folium—semen. An ovate-oblong leaf, or seed. Ovate lengthened out.

Ovato-subulata capsula. An ovate-subulate capsule. Between ovate and awl-shaped, but most tending to the latter. As in *Aconitum.*

P

PAGINA *superior—inferior* folii. The upper and lower surface of a leaf. Otherwise called *supinus* and *pronus discus.*

PAIR. *Jugum.* Applied to the leaflets in pinnate leaves; which are said to be *bijuga, trijuga,* &c. from having two, three, &c. pairs of leaflets.—Two-paired, three-paired, &c.

PALATUM. The Palate. *Gibbositas prominens in fauce corollæ.* Philos. bot.—*Processus labii inferioris superiora versus quo rictus occluditur.* Delin. pl.—A prominency in the throat of a corolla, in Labiate flowers—or, a process of the lower lip, extending towards the upper part, by which the gape or opening is closed.

PALEA. A Chaff. *Lamella receptaculo innata, flosculos distinguens.* A thin membrane, springing from the receptacle, and separating the florets, in some aggregate flowers. Hence such a receptacle is called

Paleaceum. Paleaceous or Chaffy. As in *Dipsacus*, *Scabiosa*, &c. See *Chaffy*.

Paleaceus Pappus. A Chaffy crown or down to some seeds; as in *Bidens*, *Silphium*, *Tagetes*, *Coreopsis*, &c.

PALMÆ. The sixth family; and the first of the nine great tribes, nations, or casts, into which Linneus has divided all vegetables. They are placed in the Appendix to the artificial system, and take the lead in the natural orders, though Linneus had placed them only in the second place, in his fragments of a natural method.

Palmaris mensura. The measure of a palm or hand. See *Measures*.

PALMATA radix. A Palmate root. Consisting of several oblong tubers or knobs, spreading out like the fingers. As in some sorts of *Orchis*.

Palmatum folium. A Palmate or hand-shaped leaf. — *Longitudinaliter in partes plures subæquales*

æquales divisum versus basin, quæ tamen cohærent in unum. Philos. bot. *Divisum ultra dimidium in lobos subæquales.* Delin. pl.—Divided beyond the middle into several lobes that are nearly equal: as in *Passiflora cærulea.* It resembles the hand with the fingers spread; and is one of the simple leaves: whereas the *Digitate* leaf resembles the fingers spread, without the hand; and, having all the leaflets separate, is one of the compound leaves.

PANDURÆFORME (Pandura, a musical instrument of the guittar kind, in Mersennus) *folium.* A guittar-shaped leaf. The French call it *en forme de violon.—Oblongum, inferne latius, lateribus coarctatum.* Philos. bot. Oblong, broader below, contracted on the sides. In *Delin. pl.* the explanation is differently worded.—*Oblongum, lateribus inferne coarctatum.* Oblong, contracted below at the sides. The former appears to me to be right.—It is exemplified in *Rumex pulcher*, and *Convolvulus panduratus.*

PANICULA (Dimin. from *panica, ramea coma;* or rather from *panus*, the woof about the quill in the shuttle). Panicle.—*Fructificatio sparsa in pedunculis diverse subdivisis.* A fructification, or species of inflorescence, in which the flowers

or

er fruits are ſcattered on peduncles variouſly ſubdivided. As in Oats and ſome of the Graſſes.

Panicula congeſta. A heaped panicle. Having great abundance of flowers.

Panicula denſa. A denſe or cloſe panicle. A higher degree of the preceding. Or rather, having the flowers cloſe as well as abundant.

Panicula ſpicata. Approaching in form to a ſpike: as in ſeveral of the Graſſes, which are commonly called Spiked Graſſes.

Panicula contracta. A greater degree of the foregoing.

Panicula coarctata. A ſqueezed panicle. Having the pedicels extremely near to each other.

Panicula patens. A ſpreading panicle. Having the pedicels ſpreading out ſo as to form an acute angle with the ſtalk.

Panicula diffuſa. A diffuſed panicle. Having the pedicels ſpreading out more and irregularly.

Panicula divaricata. A divaricating panicle.—Spreading out ſtill more, at an obtuſe angle with the ſtalk.

Paniculatus *Caulis.* A Panicled ſtem. Having branches variouſly ſubdivided.

Paniculata Gramina. Panicled Graſſes. Having their fructifications in a panicle.

Papilionacea (Papilio, *a Butterfly*). A Papilionaceous or Butterfly-ſhaped corolla.—Irregular, and (uſually) four-petalled. The lower petal is ſhaped like a boat, and is called *carina* or the keel: the upper petal, which ſpreads and riſes upwards, is called *vexillum*, ſtandard or banner: the two ſide ones ſtand ſingly, being ſeparated by the keel, and are called *alæ*, the wings.—The keel is ſometimes ſplit, and then this corolla is properly five-petalled. Theſe flowers form a natural claſs, called *Papilionaceæ*; and are to be found in the fifty-fifth order of Linneus's Fragments, and in the thirty-ſecond of his Natural Orders. They are chiefly comprehended within the order *Decandria* of the claſs *Diadelphia*, in the artificial ſyſtem.—This is one of Tournefort's claſſes; and is the ſame with the *Leguminoſæ* of Ray, and other authors.—The Pea being the moſt obvious of theſe, ſome call them *Pea-bloſſomed* flowers.

Papillosum (Papilla, *a nipple*) *folium. Quod tegitur punctis veſicularibus.* Philoſ. bot. This explanation

planation is, in *Delin. pl.* more properly referred to *papulosum*; and there the *Papillose* leaf is defined—*tectum punctis carnosis*; having the surface covered with fleshy dots or points: and is made synonymous with *verrucosum*, warted. If so, the term might be spared.

PAPPUS. (Anciently put for *senex*, an old man, whence it was applied to the down on the seed of thistles, &c. being like the gray hairs of old age.) Commonly translated down: but hence arises a confusion between this and the *lanugo* or *tomentum* on the surface of leaves, &c. which we usually call *down*. Pliny however will justify us in some degree: for speaking of the *Cactus* (l. 21, c. 16) he says—*Semen ei lanuginis, quam pappum vocant.*—Some endeavour to get rid of this difficulty by translating Pappus, *the Feather*, but I think not successfully; for we cannot say a *hairy feather* and a *feathered feather.*—The French name is *Aigrette*. The Ladies have adopted that term: why may not we?

Linneus explains it to be—*Corona (seminis) pennacea pilosave volitans.* A feathery or hairy flying crown to the seed.—The first he calls *Pappus plumosus*; and indeed it resembles a feather in its structure:—the second *Capillaris*, *pilosus*

pilosus or *simplex*; having the hairs undivided. See *Capillary*.—This crown is either placed immediately on the seed, and is then said to be *sessilis* or sessile; or else there is a thread interposed between it and the seed, which Linneus calls *Stipes*, and then it is said to be *stipitatus*, stipitate or stiped. — This *Down* is one of nature's most obvious means of dispersing seeds to a considerable distance.

PAPULOSUM *folium*. (*Papula*, a pimple.) A pimply, bladdery or blistered leaf. — *Tectum punctis vesicularibus*. Covered with little blisters.

PARABOLICUM *folium*. A Parabolic leaf. *Cujus diameter longitudinalis superat transversalem, & a basi sursum angustatur in semiovatum*. Philos. bot. Having the longitudinal diameter exceeding the transverse one, and narrowing from the base upwards into a half ovate.—In *Delin. pl.* it is not so fully expressed—*versus apicem sensim angustius rotundatum*. Rounded gradually towards the top into a narrower form.

PARASITICUS *caulis*. *Parasitica planta*. A parasitical stem or plant. *Alteri plantæ nec terræ innatus*. Growing on some other plant, not on the ground.—As *Epidendrum*, *Tillandsia*.

PARTES

PARTES *primariæ*. The primary parts of a Vegetable are—1. The *Root*, defcending, imbibing fluid, nourifhing. 2. The *Herb*, afcending, breathing air, moving. 3. The *Fructification*, expanding, inhaling ether, generating.

PARTIALIS *umbella*. A partial Umbel: otherwife called *Umbellula*. A fmaller umbel, proceeding from the general or univerfal umbel.—*Umbellula quæ prodiit ex univerfali*.—The involucre at the foot of this is called the Partial involucre. *Involucrum partiale*. — *Pedunculus partialis*, a Partial peduncle, is a fubdivifion of a common peduncle. See *Umbella* and *Pedunculus*.

PARTITION. *Diffepimentum*. A wall feparating a pericarp internally into cells.—This is either *Parallel*: that is, approaching in breadth and its tranfverfe diameter to the valves: as in *Lunaria* and *Draba*. Or, *Contrary*; that is, narrower than the valves: or, as it is expreffed more fully in *Delin. pl.*—narrower, when the valves by being fqueezed or contracted become concave. *Anguftius ubi valvulæ coarctatæ evadunt concavæ*.—This is exemplified in *Bifcutella* and *Thlafpi*. — Linneus borrowed thefe terms from Tournefort; and fays that they are

to be underſtood cum *grano ſalis.*—I ſhould have conceived a parallel partition in a ſiliqua or pod to have been in the direction of the valves—a contrary or tranſverſe one, at right angles with the valves.

PARTITUM *folium.* A Parted leaf. Simple, but divided almoſt down to the baſe.—According to the number of diviſions it is called—*Bipartitum, Tripartitum,* &c. Bipartite or two-parted; Tripartite or three-parted, &c.—It is applied in the ſame ſenſe to the Perianth and Corolla.

PATENS *folium.* A Spreading leaf. *Quod ad angulum acutum cauli inſidet.* Forming an acute angle with the ſtem or branch on which it is placed; between erect and horizontal. Applied alſo to the Stipule and the Petiole.

Patentes Rami. Spreading branches. Making an acute angle with the ſtem.

Patentiſſima folia ſ. *petala.* Leaves or petals ſpreading very much: making almoſt a right angle with the ſtem or peduncle.

PATULUS (dimin. of *Patens*) *calyx*; as in *Sinapis*, and *Ranunculus acris* and *repens*.—*Pedunculus*; bearing the flowers looſe or diſperſed; oppoſed to *coarctatus*, ſqueezed or contracted.—I do not know

know that there is any difference in ſenſe between *Patens* and *Patulus*.

PECTINATUM *folium*. A Pectinate leaf. A ſort of pinnate leaf, in which the leaflets are toothed like a comb: as in *Artemiſia pectinata*.

PEDATUM *folium* (Pes, *a foot*). A Pedate leaf. *Cum petiolus bifidus latere tantum interiore adnectit foliola plura.* When a bifid petiole connects ſeveral leaflets on the inſide only. This is a ſpecies of Compound leaf, and bears ſome reſemblance to a bird's foot. It is exemplified in *Paſſiflora*, *Arum*, and *Helleborus fœtidus*. It is applied alſo to the Raceme.

PEDATIFIDUM *folium*. A pedatifid leaf. This is to pedate, what pinnatifid is to pinnate: the parts of the leaf not being ſeparate; but connected, as in the feet of water fowl. Exemplified in *Arum muſcivorum*.

PEDICELLUS. A Pedicel or Pedicle. — In *Philoſ. botan.* it is interpreted — *pedunculus partialis*, a partial peduncle. But in *Delin. pl.* a Partial peduncle is a ſubdiviſion of a Common peduncle, ſupporting a few flowers. — The genuine notion of a *Pedicel* is, that it ſupports one flower only where there are ſeveral on a pedun-

peduncle: or, it is the ultimate subdivision of a common peduncle, immediately connected with the flower itself.

PEDUNCULUS (dimin. from *Pedo*, *pedare* the same with *fulcire*, to prop or support. I am at a loss to conceive how Dr. Berkenhout came to derive it from the noun *Pedo*, splay-footed). A Peduncle. By older writers called the *Foot-stalk*; by several moderns the *Fruit-stalk*. To the first of these I object, because we have then the same term for the support of the fructification and of the leaf: to the second, because the peduncle being the support of the flowers as well as the fruit, we are reduced to the absurdity of saying a many-flowered Fruit-stalk. To both I object, because *Peduncle* is generally received, and is intelligible in every nation where Botany is studied.

The peduncle is the fulcre of the fructification, or a partial stem supporting that only. The explanation in *Philos. bot.* is thus expressed —*truncus partialis elevans fructificationem, nec folia.*—In *Delin. pl.* thus—*fulcrum sustinens fructificationem.*—In *Regn. veget.* it is said to be —*ramus caulis floriferus*: a flower-bearing branch from the stem. The last is the least accurate of the three; and wants the exclusion of the leaves, as in the first.

Ray and other old writers use the classical term *Pediculus*. Linneus probably changed it for *Pedunculus*, because the former signified a sort of insect, as well as the little stalk that supports a fruit.

With respect to its *Place*, a peduncle may be

1. *Radicalis*. Radical, or proceeding immediately from the root: as in the *Primrose*.

2. *Caulinus*. Cauline, or proceeding from the stem.

3. *Rameus*. Rameous, or proceeding from a branch. These may be called in English—*a root peduncle—a stem peduncle—a branch peduncle*.

4. *Petiolaris*. Petiolary, or proceeding from the petiole.

5. *Cirrhiferous*. Cirrhiferous, or tendril-bearing.

6. *Terminalis*. Terminating, or proceeding from the top of the stem.

7. *Axillaris*. Axillary, or proceeding from the angle made by the leaf and stem, or the branch and stem.

8. *Oppositifolius*. Opposite to a leaf.

9. *Lateriflorus*. Having the flower on the side of it.

10. *Inter-*

10. *Interfoliaceus*. Among the leaves—I rather think that this is a miſtake for *Intrafoliaceus*, within the leaf.

11. *Extrafoliaceus*. Without, or on the outſide of the leaf.

12. *Suprafoliaceus*. Inſerted into the ſtem higher than the leaf or its petiole.

With reſpect to their *Situation*, peduncles may be

1. *Oppoſite* to each other; or, 2. *Alternate*.

3. *Sparſi*, ſcattered; without any regular order.
4. *Verticillati*, in whorls.

With reſpect to their *Number*, they may be

1. *Solitarii*. Solitary or ſingle.

2. *Geminati*. Double; two together, or in pairs.

In an Umbellule there are ſeveral equal peduncles diverging from the ſame point or centre.

According to the number of flowers which a peduncle bears, it is called—*uniflorus*, *biflorus*, *triflorus*, &c. and *multiflorus*.—One, two, three-flowered, and many-flowered.

With respect to its *Direction*, a peduncle may be,

1. *Appressus*. Pressed close to the stem.
2. *Erectus*. Upright.
3. *Patens*. Spreading.
4. *Cernuus*. Drooping. Pointing to the ground.
5. *Resupinatus*. Upside down.
6. *Declinatus*. Bowed or curved downwards.
7. *Nutans*. Nodding. Curved downwards more than in n. 6. but less than in n. 4.
8. *Adscendens*. Rising gradually.
9. *Flaccidus*. Weak, so as to bend with the weight of the flower.
10. *Pendulus*. Loose, so as to tend downwards with the leaf.
11. *Strictus*. Stiff and straight.
12. *Flexuosus*. Bending this way and that.
13. *Retrofractus*. Bent backwards, as if broken.

With respect to its *Mensure*, a peduncle is,

1. *Brevis—brevissimus*. Short, very short.
2. *Longus—longissimus*. Long, very long.

With

With respect to its *Structure*, a peduncle is,

1. *Teres.* Round, cylindric, or rather columnar.

2. *Triqueter.* Three-sided.

3. *Tetragonus.* Four-cornered.

4. *Filiformis.* Like a thread. Of the same thickness in all its parts.

5. *Attenuatus.* Tapering gradually towards the top.

6. *Incrassatus.* Growing gradually thicker towards the top.

7. *Clavatus.* Club-shaped. Thick at the end.

8. *Nudus.* Naked.

9. *Squamosus.* Scaly.

10. *Foliatus.* Leafy.

11. *Bracteatus.* Furnished with bractes.

12. *Geniculatus.* Kneed. Bent at the joints.

13. *Articulatus.* Jointed.

Peduncularis. Growing from a peduncle; as some tendrils do.

Pedunculatus flos—verticillus. A peduncled flower or whorl: in opposition to one that is close to the stem—*sessilis.*

Pelta. A flat fructification on some Lichens, resembling a round shield; whence its name.

Peltatum *folium*. A Peltate or Target-shaped leaf. Having the petiole inserted into the disk of the leaf, instead of the edge or base, as is most usual. As in *Nymphæa*, *Hernandia*, *Colocasia*, *Hydrocotyle*, *Tropæolum*, *Geranium peltatum*. —Applied also to a stigma, when it is round and flat, like a *pelta*.

Penicilliformis *appendix*. An appendix to the keel of the corolla in some sorts of *Polygala*; in shape of a painter's pencil.

Penicilliforme stigma. A pencil-shaped stigma: as in *Milium*.

Pentacocca *capsula*. A pentacoccous or five-grained capsule. Swelling out in five protuberances; or, having five united cells, with one seed in each.

Pentagonus *caulis*. A pentagonal or five-cornered stem. It is a species of Linneus's Ancipital stem, and he seems to distinguish it from *Quinquangularis*.—He describes the capsule of *Euonymus* as being — *Pentagona, quinquangularis*.

Pentagynia. The name of one of the Orders in the fifth, tenth, eleventh, twelfth, and thirteenth classes in the Linnean System; containing those plants which have five pistils in a hermaphrodite flower.

Pentandria. The name of the fifth class in Linneus's system; comprehending those plants which have hermaphrodite flowers with five stamens.

Pentapetala *Corolla*. A pentapetalous or five-petalled corolla; or a corolla of five petals: as in the *Umbellatæ*, &c.

Pentaphyllus *Calyx*. A pentaphyllous or five-leaved calyx, or rather perianth: as in *Cistus*, *Adonis*, *Cerbera*.

Perennis *Radix—Caulis*.—A perennial root or stem. Continuing more than two years.

Perfectus *flos*. A perfect flower. Having both stamen and pistil; or at least anther and stigma: the same therefore with *Hermaphrodite*. Delin. pl.—In Philos. botan. it is synonymous with *Petalodes* of Tournefort.—But the having a corolla only, is by no means sufficient to constitute perfection in a flower, according to Linneus's

 idea;

idea: neither does the want of it argue imperfection.

PERFOLIATUM *folium*. A Perfoliate leaf. *Si basis folii undique cingat transversim caulem.* Philos. bot.—*Basi transversim cingente (nec antice dehiscente) caulem.* Having the base of the leaf entirely surrounding the stem transversely; (without any opening in front).—The latter clause of this explanation added in Delin. pl. is not absolutely necessary to discriminate this from the stem-clasping leaf (*Amplexicaule*); if the terms of the two explanations in *Philos. bot.* be carefully attended to. The base of that is said to surround the *sides* of the stem; whereas in this, the base encircles it quite round; so that it seems as if the stem had been driven through the middle of the leaf. The Perfoliate leaf is well exemplified in *Bupleurum rotundifolium.*

After all, *Folium perfoliatum* appears to me to be an improper term. I should rather have said *Caulis perfoliatus*; a perfoliate stem.

PERFORATÆ. The name of the sixtieth order in Linneus's fragments of a natural method. So called because the plants contained in it have the leaves perforated with small holes.

PERFORATUM *folium*. A Perforated leaf. Full of ſmall holes, very apparent when held up to the light. As in *Hypericum*.

If there be any difference of meaning in the three terms *Perforatum*, *Pertuſum*, *Punctatum*; the firſt may be rendered *Perforated*; the ſecond *Punched*; and the third *Dotted*. In *Delin. pl.* they are ſet down as ſynonymous, and are explained to be—*adſperſa punctis excavatis*: that is, having hollow dots ſcattered over the ſurface. In *Philoſ. bot.* we find only the term *Punctatum*, explained in the ſame manner. There alſo (p. 211.) mention is made of leaves that are dotted underneath; as in *Anagallis* and *Plantago maritima*.

The term *Perforatum* is applied alſo to a Stigma, having a hole bored through it.

PERIANTHIUM (περι *about*, and ανθος a *flower*.) The Perianth, or calyx of a flower when contiguous to the other parts of fructification. *Calyx fructificationi contiguus*.—In Regn. veget. it is—*corollæ approximatum*: but it frequently happens that a flower has a perianth without any corolla.—The Perianth is often, but improperly, called the calyx excluſively; for this latter term has a more extenſive ſignification. See *Calyx*.

Perianth

Perianth of the fructification, includes the ſtamens and germ.

Perianth of the flower, contains the ſtamens without the germ.

Perianth of the fruit, contains the germ without the ſtamens.

For the difference between Perianth and Bracte, ſee *Bractea*.

1. *Perianthium Caducum*. A caducous perianth. Falling before the flower opens. — *Deciduum*, deciduous. Falling after the flower opens.— *Perſiſtens*, permanent. Continuing after the flower is withered.

2. *Proprium*, Proper. Belonging to one flower. —*Commune*, Common. Belonging to ſeveral.

3. *Monophyllum*, &c. *Pollyphyllum*. One-leafed, &c. Many-leaved.

4. *Bifidum*, &c. Two-cleft, Three-cleft, &c. —*Bipartitum*, &c. Two-parted, &c. — *Integrum*, Entire.

5. *Tubuloſum*.—*Patens*.—*Reflexum*.—*Inflatum*.— Tubular. Spreading. Reflex. Inflated, hollow, or puffed up like a bladder.

6. *Abbre-*

6. *Abbreviatum.—Longum.—Mediocre.*—Abbreviated; or ſhorter than the tube of the corolla.—Long; that is, longer than the tube. Middling; or about the ſame length.

7. *Obtuſum.*—Blunt.—*Acutum*, ſharp.

8. *Spinoſum.* Thorny.—*Aculeatum.* Prickly.

9. *Æquale.* Equal. Having all the parts correſponding in ſize and proportion.—*Inequale*, Unequal.

10. *Labiatum*, Labiate, or lip-ſhaped.

11. *Superum*, Superior. Above the germ.—*Inferum*, Inferior. Below the germ.

12. *Imbricatum*, Imbricate.—*Squarroſum.* Squarroſe, or having a ragged appearance, from the irregular diſpoſition of the ſcales.—*Calyculatum.* Calycled. Having a ſmaller calyx or perianth at the baſe of the larger. *Scarioſum.* Scarioſe. Tough, thin, and ſemitranſparent.—*Turbinatum.* Turbinate, or top-ſhaped: inverſely conical: ſhaped like a boy's top or a pear.

Pericarpium (περι and καρπος, *fruit* or ſeed.) A Pericarp, Seed-veſſel or Seed-caſe. *Viſcus gravidum ſeminibus, quæ matura dimittit.—Vaſculum ſemina producens dimittenſque.—Ovarium fæcun-*

fœcundatum. Philoſ. bot. 52, 56, 92.—*Germen deſloratum ſeminiferum*. Regn. veg.—A viſcus big with ſeeds, or a veſſel producing ſeeds, which it lets drop when they are ripe.—Or it may be conſidered as the ovary or germ ſecundated, or arrived to a ſtate of maturity, after the flower is paſt; containing ripe ſeeds analogous to fruitful eggs.

The moſt remarkable pericarps are the *Capſule*—*Silique*—*Legume*—*Follicle*—*Drupe*—*Pome*—*Berry*—*Strobile*.

PERICHÆTIUM (περι and χαιτη, *juba*) *Involucrum ſetoſum, quod inter foliola baſin cingit*.—A briſtly involucre, ſurrounding the baſe, among the leaflets: in Moſſes.

PERMANENT. *Perſiſtens*.—Applied to leaves that remain on the plant till the fruit is ripe, or after the ſummer is over—To ſtipules continuing after the leaves drop off; as in the claſs *Diadelphia*, and the order *Polygynia* of claſs *Icoſandria*—To calyxes, abiding after the corolla is withered; as in the claſs *Didynamia*.

PERSONATA (*Perſona*, a maſk) *corolla*. A perſonate or maſked corolla. *Ringens, ſed inter labia palato clauſa*. Ringent, but cloſed between the lips by the palate.—But ſurely ringent or

gaping with the lips closed, is a contradiction in terms. It would be better to define it, a species of labiate corolla which has the lips closed. See *Labiate*.

Tournefort, from whom Linneus adopted these terms, is clear and precise in his distinction. A *Labiate* flower, according to him, is drawn out at bottom into a tube, and is widened out at top either into one or two lips. The pistil becomes a fruit of four seeds ripening in the calyx as in a capsule: as in *Salvia, Horminum, Marrubium, Chamædrys.*— A *Personate* flower differs from this in having the pistil becoming a capsule entirely distinct from the calyx. It has something of the same appearance as the labiate flower; but does not ill represent a mask, or the snout of some animals. This he exemplifies in *Linaria, Antirrhinum, Pedicularis, Melampyrum.*—There are some irregular monopetalous flowers which Linneus includes under his *Ringentes*, that are neither *Labiati* nor *Personati* of Tournefort: as *Digitalis* and *Scrophularia*.

PERTUSUM. Punched. Applied to a leaf which has hollow dots all over the surface. See *Perforatum*.

PES and *Pedalis mensura*. The measure of a foot. See *Measures*.

PETALUM

Petalum (πέταλον, from πετάω, to expand). A Petal. The Greek word ſignifies a leaf; but it has been appropriated by Columna, and from him by other modern authors, to the *flower-leaf*.—*Tegmen floris corollaceum*, Philoſ. bot.— The corollaceous integument of the flower.— In flowers of one petal, the corolla and petal are the ſame. In flowers of ſeveral petals, the corolla is the whole, and the petals are the parts. Or, to ſpeak more accurately—in a monopetalous flower, the petal is the corolla, excluſive of the nectary: in a polypetalous flower, it is one of the leaves of which the whole corolla is compoſed.

In the former, it conſiſts of the *tube* and *limb*. In the latter of the *claw* and *lamina*.

Petaliforme ſtigma. A petal-ſhaped ſtigma: as in *Iris*.

Petalinum nectarium. A petaline nectary.

Petalodes flos. A petalled flower; or, a flower having petals; in oppoſition to *Apetalous*, deſtitute of petals, or having no corolla.

Petiolus. A petiole, Leaf-ſtalk or Foot-ſtalk. *Trunci ſpecies, adnectens folium, nec fructificationem*. Philoſ. bot. *Fulcrum ſuſtinens folium*. Delin. pl. *Ramus foliiferus, folia proprius*. Regn. veg.

—A partial ſtem, ſupporting the leaf, or connecting it with the ſtem or branch.—It ſometimes happens, but very rarely, that the ſame foot-ſtalk ſupports both leaf and fructification, as in *Turnera* and *Hibiſcus*.

Petiolulus. A Partial Petiole. Connecting a leaflet with the main petiole, in compound leaves.

Petiolaris cirrus. A petiolar tendril. Proceeding from the petiole of a leaf.—*Pedunculus*. A petiolar peduncle. Inſerted into a petiole.—*Gemma*. A petiolar bud. Formed from a petiole.—*Glandula*. A petiolar gland. Growing on the petiole: as in *Ricinus*, *Iatropha*, *Paſſiflora*, *Caſſia*, *Mimoſa*, &c.

Petiolatum folium. A Petiolate or Petioled leaf. Growing on a petiole or footſtalk, inſerted into it uſually at the baſe. Oppoſed to ſeſſile.

Pileus. The cap of a Fungus, expanding horizontally, and covering the fructifications.

Pilosum *folium*. A hairy leaf. Having the ſurface covered with long diſtinct hairs: as in *Cortuſa*, *Juncus piloſus*, *ſylvaticus*, *campeſtris*.—*Piloſum ſemen*. A hairy ſeed. As in *Centaurea* and *Tragopogon*.—*Piloſum receptaculum*. A hairy

hairy receptacle. Having hairs between the florets.

Pilus. A hair. *Ductus excretorius plantæ setaceus.* An excretory duct of a plant, in shape of a bristle.—This appears to be an improper explanation of *hair* by *bristle*, inasmuch as a bristle is only a stiff hair.—It is a sort of Pubescence.

Pimpled or pimply leaf. See *Papulosum.*

Pinna. The large feather of a bird's wing; or a fin in fish. Applied in Botany to the leaflet of some compound leaves.

A subdivision of the pinna is called *Pinnula.*

Pinnatifidum *folium.* A Pinnatifid leaf. By the Lichfield Society called Feather-cleft.—*Transversim divisum laciniis horizontalibus oblongis.*—A species of simple leaf, divided transversely by oblong horizontal segments or jags—not extending to the midrib.

Pinnatum *folium.* A Pinnate leaf. *Cum petiolus simplex lateribus adnectit foliola plura*—A species of compound leaf, wherein a simple petiole has several leaflets fastened to each side of it.

Con-

Conjugatum. Conjugate. Having only one pair of leaflets.

Bijugum. Having two —*trijugum*, having three —*quadrijugum*, having four pairs of leaflets.

Pinnatum cum impari. Unequally pinnate. Terminated by a fingle or odd leaflet.

Pinnatum abruptè. Abruptly pinnate. Not terminated either by a leaflet or tendril.

Cirrhofum. Cirrhofely pinnate. Terminated by a tendril.

Pinnatum oppofitè. Oppofitely pinnate. Having the leaflets placed over againft each other in pairs.

Pinnatum alternatim. Alternately pinnate. Having the leaflets alternate along the common petiole.

Pinnatum interruptè. Interruptedly pinnate. Having fmaller leaflets interpofed between the principal ones.

Pinnatum articulatè. Jointedly pinnate. When the common petiole is jointed.

Pinnatum decursivè. Decursively pinnate. When the leaflets run into one another along the common petiole.

Pinnulatum folium, s. pinnulata pinna. When each pinna is subdivided.

PIPERITÆ (*Piper*, Pepper). The name of the first order in Linneus's fragments; and of the second, in his natural orders.

PISTILLUM. Pistil or Pointal.—*Viscus fructui adhærens, pro pollinis receptione*. Philos. bot.—*Viscus interius e medulla. Organum genitale femineum*. Regn. veg.—A viscus or organ adhering to the fruit, for the reception of the pollen.—It is the fourth part of the fructification; and is supposed by Linneus to be a continuation of the *medulla* or pith.—Its appearance is that of a column or set of columns in the centre of the flower: and, when perfect, it consists of three parts—1. *Germen*; the Germ or Ovary. 2. *Stylus*; the Style. 3. *Stigma*.

Pistilliferus flos. A pistilliferous flower. Having a pistil without stamens. Called a Female flower by Linneus.

PITCHER-SHAPED. *Urceolatus*. Swelling or bellying out like a pitcher. Applied to the calyx, corolla and nectary.

Pith. See *Marrow* and *Medulla*.

Pitted leaf. See *Lacunosum*.

Placenta. See *Receptaculum*.

Placentatio. Placentation. *Est cotyledonum dispositio sub ipsa seminis germinatione*. The disposition of the cotyledons or lobes in the vegetation or germinating of the seed.—Hence vegetables are distributed into — 1. *Acotyledones*. 2. *Monocotyledones*. 3. *Dicotyledones*. 4. *Polycotyledones*.

Plaited. Plicatus. Folded like a fan. Distinguished from waved by the folds being angular. Applied to the leaf; as in *Alchemilla*:—to the corolla; as in *Convolvulus*:—to the nectary; as in *Narcissus Tazetta*. It is also a term in *Foliation* and *Placentation*.

Planta. A Plant. In common language synonymous with Vegetable: but frequently used in a more restricted sense. Plants are placed by Linneus in the last of the seven Families into which he has distributed the whole Vegetable kingdom. Comprehending all that are not *Funguses*, *Algas*, *Mosses*, *Ferns*, *Grasses* or *Palms*. They are, 1. *Herbaceous*. 2. *Shrubs*. 3. *Trees*. Philos. bot. p. 37.—In Regn. veg.

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he has ſunk the word *Plantæ;* and has divided them into *Lilia, Herbæ, Arbores.*

PLANUM *folium.* A Plane or flat leaf.—*Quod utramque ſuperficiem ubique parallelam gerit.* Having the two ſurfaces parallel.—In Delin. pl. it is—*ſuperficie æquali.* Having an even ſurface: but this explanation is defective.

Plano-convexum Stigma. A plano-convex ſtigma. Flat on one ſide, and riſing on the other.

Plenus. See *Full.*

PLICATUS. Plaited.—Plicatum folium. *Quum diſcus folii verſus marginem ad angulos adſcendit & deſcendit.*—Plicata foliatio: *In plicas varias coarctata.* See *Plaited.*

PLUMOSA or *Plumata Seta.* A plumoſe or feathered briſtle. *Villoſa, compoſita.* Having hairs growing on the ſides of the main briſtle. Reſembling a feather.

PLUMOSUS *Pappus.* Plumoſe, feathered or compound Down. *Pilis pennatis conſtans*—ſ. *villoſus compoſitus.*—A flying crown to ſome ſeeds compoſed of compound or feathery hairs: as in *Crepis, Scorzonera, Tragopogon.* Oppoſed to Capillary. See *Pappus.*

PLUMULA. The plume, or afcending fcaly part of the *Corculum* or Heart of the feed.

Pointal. See *Piftillum*.

POLLEN. Farina, or prolific powder, like fine meal or flower, contained in the anther of flowers; and which, according to Linneus, being moiftened with a liquor peculiar to it, and lodged upon the ftigma, burfts like a bladder, and explodes elaftically a fubftance imperceptible to the naked eye; which he calls *Fovilla.*—*Pulvis floris, humore rumpendus, atomofque elafticos ejaculans*—vel, *appropriato liquore madefactus rumpendus, & fubftantiam fenfibus nudis imperfcrutabilem elaftice explodens.* — *Eft omne Pollen veficulare, & continet materiam impalpabilem, quam explodit.* Philof. bot. p. 53, 56, 90.

Pollen, when expofed to the microfcope, is found to put on a great variety of forms in the flowers of different plants. Thus in *Helianthus* it is a prickly ball, like a burr. In *Geranium* it is perforated. In *Symphytum* it is twin or double. In *Malva* it is a toothed wheel. In *Viola* it is angular. In *Narciffus* it is kidney-fhaped. In *Borago* it is like a roll of parchment.

POLLEX f. *pollicaris menfura*. See *Meafures*.

POLYADELPHIA (πολυς *many*, and αδελφος *a brother*: *feveral brotherhoods*). The name of the eighteenth clafs in the Linnean fyftem; comprehending thofe plants which bear hermaphrodite flowers, with three or more fets of united ftamens.

POLYANDRIA (πολυς, and ανηρ *a hufband*). The name of the thirteenth clafs in the Linnean fyftem, comprehending thofe plants which bear hermaphrodite flowers with many ftamens (from twenty to a thoufand) growing fingle on the receptacle. The number of the ftamens diftinguifhes this from the firft eleven claffes; their fituation (on the receptacle) feparates it from the twelfth clafs, *Icofandria*: and their fimplicity avoids all confufion with the fixteenth and eighteenth claffes — *Monadelphia* and *Polyadelphia*.

POLYCOTYLEDONES *Plantæ*. Plants which have more than two cotyledons or lobes to the feed: as *Pinus*, *Cupreffus*, *Linum*.

POLYGAMÆ (πολυς and γαμος, *feveral marriages*) *Plantæ*. A Polygamous plant is that which has hermaphrodite, and either male or female flowers, or both.

POLY-

Polygamia. The name of the twenty-third clafs in the Linnean fyftem; comprehending thofe plants which bear hermaphrodite flowers, accompanied with male or female flowers, or both; not inclofed within the fame common calyx, but fcattered either on the fame plant, or on two, or on three diftinct individuals. Whence the three Orders of this clafs—1. *Monœcia*. 2. *Diœcia*. 3. *Triœcia*.

Some modern reformers have entirely difcarded this Clafs, and thus have fimplified the Linnean arrangement, and rendered it more eafy to beginners; but they have at the fame time wholly mutilated it, confidered as a Sexual Syftem. We may go on reforming till we reduce it to the fimplicity of Rivinus's fyftem; when it will acquire great facility, and at the fame time become good for nothing.

This term *Polygamia* or Polygamy, as applied to a compound flower, in the orders of the clafs *Syngenefia*, fignifies that feveral diftinct flowers (called *Florets*) are included in one common calyx. Thefe may be all hermaphrodites, as in the firft order; or hermaphrodites with female flowers, as in the fecond, third, and fourth.

Polygonus *caulis*. A many-angled ftem. Having feveral (more than fix) prominent longitudinal

dinal angles. *Delin. pl.*—But in *Philos. bot.* it is a ſpecies of *Anceps. Multangularis* is explained in *Delin. pl.* to be—excavated longitudinally by ſeveral hollow angles. According to this explanation therefore, the former term refers to the angles in *cameo*, the ſecond to thoſe in *intaglio.*—But in *Philoſ. bot.* the *Multangular* ſtem is ſaid to have ſeveral prominent angles.

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POLYGYNIA (*πολυς*, and *γυνη a wife*). The name of one of the orders, in the fifth, ſixth, twelfth and thirteenth claſſes of the Linnean ſyſtem; comprehending thoſe plants which have flowers with many piſtils.

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POLYPETALA *corolla.* A Polypetalous corolla—or, a corolla of many petals.—Linneus uſes this term in oppoſition to a monopetalous corolla; that is, conſiſting of one petal only. By former writers it was commonly put for a flower of more than ſix petals; and Linneus uſes the terms *monopetala*, *dipetala*, &c.

POLYPHYLLUS. Many-leaved. Applied to the calyx, perianth, involucre, and *cirrus* or tendril; in oppoſition to *monophyllus*, one-leafed.—Here alſo Linneus uſes *diphyllus*, *triphyllus*, &c.

POLYSPERMA *capsula—bacca.* A many-seeded capsule or berry: containing several seeds.

POLYSTACHYUS *culmus.* A culm bearing several spikes. As in *Scirpus lacustris, holoschoenus,* and *setaceus.*

POMACEÆ. The name of the thirty-seventh order in Linneus's fragments; and of the thirty-sixth in his natural orders. Comprehending such plants as bear a Pome, or fruit resembling the apple.

POMUM. A Pome. *Pericarpium farctum evalve, capsulam continens.* A pulpy pericarp without valves, containing a capsule.—It includes all the moist fruits which have the seeds lodged in a core; as *Apple, Pear, Quince,* &c.

PRÆMORSUS. Bitten off. *Præmorsa radix:* not tapering, but ending blunt, and thus appearing as if it were bitten off short at the end, as in *Scabiosa, Plantago, Valeriana. Præmorsum folium;* ending very obtusely, with unequal notches.—*Præmorsa corolla:* as in *Althea.*

PRECIÆ. Early ripe. The name of an early sort of Grape in Virgil. The fifty-first order in Linneus's fragments; and the twenty-first

in his natural orders: comprehending fuch plants as flower early in the fpring.

PRICKLE. *Aculeus.* A fharp procefs from a plant, fixed into the bark only: as in *Rofe*, *Bramble*, *Goofeberry*, and *Barberry*. This and the Thorn are called *Arma* by Linneus, and are enumerated among the Fulcres.

Prickles are ftraight—bent in, *incurvi*; or bent back, *recurvi*.—When divided, they take the name of *Furcæ*, forks or forked prickles; and are called bifid, trifid, &c. from the number of divifions.

PRICKLY. *Aculeatus.* Armed with prickles. Applied to the ftem, ftipe, leaf, petiole, and perianth.

PRISMATICUS *calyx*. *Prifmaticum ftigma—pericarpium.* A prifmatic or prifm-fhaped calyx or perianth—ftigma—pericarp. *Cum lineare polyedrum fit, lateribus planis.* Linear, or of the fame thicknefs from top to bottom, with feveral flat fides.

PROCUMBENS *caulis*. A procumbent ftem. *Horizontaliter fupra terram.* Philof. bot. *Debilis terræ innitens.* Delin. pl.—Unable to fupport itfelf, and therefore lying upon the ground—but

but without putting forth roots. See *Repens.* —The procumbent, trailing, or proftrate ftem, as it is fometimes called, is exemplified in *Convolvulus Soldanella.*

Prolifer *caulis.* A proliferous ftem. *Ex apicis centro tantum emittens ramos.* Putting forth branches only from the centre of the top: as in *Pinus.*—Prolifer flos. A Proliferous flower. —*E centro floris alium protrudens.*—*Cum intra florem (fæpius plenum) alii flores enafcuntur.* Having fmaller flowers growing out of the principal one: as in *Childing Daify.*—Prolifera Umbella. A Proliferous Umbel. *Plufquam decompofita.* Every compound umbel is twice divided. In a proliferous umbel, the umbellule is fubdivided.

Prominens *diffepimentum.* A prominent partition, in a filiqua. Standing out beyond the valves.—*Prominens faux.* A prominent throat or opening in the tube of a corolla: as in *Cyclamen.*

Prominulum diffepimentum. A partition fomewhat or but a little prominent.

Pronus *difcus f. inferior pagina folii.* The lower fide, or furface, or back of a leaf.

Propago.

PROPAGO. *Semen Musci decorticatum, detectum* 1750. A peculiar name given by Linneus to the seeds of Mosses; because he supposed them to differ from other seeds in having a naked corcle or heart, without cotyledons; a discovery which he made in 1750.

PROPRIUM *receptaculum.* A Proper or peculiar receptacle. *Quod partes unius tantum fructificationis respicit.* That which respects the parts of a single fructification: in opposition to a Common receptacle, connecting several florets, as in the Aggregate flowers.—*Proprium Perianthium—Involucrum.* A Proper perianth, or involucre: respecting one flower only. As in simple flowers. Aggregate flowers have usually both a calyx *common* to the whole, and a perianth *proper* to each floret.—*Proprius flos—Propria corolla.* A Proper flower or corolla. One of the single florets or corollets in aggregate flowers: in opposition to the common or compound flower, consisting of the aggregate of florets, making one whole.—*Proprium Nectarium.* A proper, peculiar or distinct nectary. Separate from the petals and other parts of the flower.

Protruded. See *Exsertus.*

PUBES. Pubescence. *Hirsuties omnis in planta*

Delin.

Delin. pl. — *vestiens villositate*. All hairiness, or shagginess in a plant; or whatever clothes it with any hairy or villous substance. Linneus's original word was *Pubescentia*, and he explained it to mean the armour of a plant, by which it is defended from external injuries: thus comprehending Thorns and Prickles under the idea of Pubescence. These however he afterwards separated, and called them with more propriety *Arma*.—The following are the different forms of Pubescence.

1. *Pili*. Hairs. Excretory ducts, in that form.
2. *Lana*. Wool: or close curled hairs.
3. *Barba*. Beard: or parallel hairs.
4. *Tomentum*. Flocks: or interwoven villous hairs scarcely conspicuous.
5. *Strigæ*. Stiffish flattish hairs.
6. *Setæ*. Bristles. Stiffish roundish hairs.
7. *Hami*. Hooks. Sharp crooked points.
8. *Glochides*. Barbs. Straight toothed points.
9. *Glandulæ* Glands. Small *papillæ* or teats, or excretory ducts in that form.

Glands seem to be improperly enumerated as a species of pubescence.

PUBES-

Pubescens. Pubescent. Covered with one of the foregoing sorts of pubescence. Applied to the stem, leaf, corolla, and style.

Pulposum *folium*. A pulpy leaf, filled with a tenacious substance between the two surfaces.—Linneus did not originally distinguish this from *Carnosum*, which has a firmer pulp.

Punched leaf. See *Perforatum* and *Pertusum*.

Punctatum. Dotted leaf. See *Perforatum*.

Putamen. The shell of a nut and other fruits allied to it.—Hence

Putamineæ. The name of the thirty-first Order in Linneus's fragments, and of the twenty-fifth in his natural orders.

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Quadrangularis *caulis*. *Quadrangulare folium*. A Quadrangular stem or leaf. Having four prominent angles.

Quadricapsulare *pericarpium*. A Quadricapsular pericarp. Having four capsules to a flower: as in *Rhodiola*.

QUADRIDENTATUS *pappus*. A four-toothed Down. Having four teeth on the edge. As in *Rudbeckia*.

QUADRIFIDUS *calyx*. A four-cleft perianth: as in *Rhinanthus*.—*Quadrifidum folium*. A four-cleft leaf. Cut into four segments with linear sinuses, and straight margins.

QUADRIJUGUM *folium*. A quadrijugous leaf. Pinnate, with four pairs of leaflets.

QUADRILOBUM *folium*. A four-lobed leaf. Divided to the middle into four distant parts, with convex margins.

QUADRILOCULARE *pericarpium*. A four-celled pericarp: as in *Euonymus*.

QUADRIPARTITUM *folium*. A four-parted leaf. Divided into four parts almost to the base.

QUADRIVALVE *pericarpium*. A four-valved pericarp: as in *Ludwigia*, *Oenothera*, &c.

QUATERNA *folia*. Four-fold leaves. Growing by fours; or, coming out four together: as in the *Stellatæ*.

QUINA *folia*. Five-fold leaves. Five together in a whirl. As in some of the *Stellatæ*.

QUINATUM *folium.* A fort of Digitate leaf, which has five leaflets on a petiole.

QUINQUANGULARE *folium.* A five-cornered leaf. Having five prominent angles about the difk.—*Quinquangularis caulis.* A five-cornered ftem.

QUINQUECAPSULARE *pericarpium.* Having five capfules to a flower: as in *Aquilegia.*

QUINQUEFIDUM *folium.* A quinquefid or five-cleft leaf. Cut into five fegments, with linear finufes, and ftraight margins. Applied to the corolla—and to the perianth, in *Nicotiana.*

QUINQUEJUGUM *folium.* A pinnate leaf, with five pairs of leaflets.

QUINQUELOBUM *folium.* A five-lobed leaf. Divided to the middle into five diftant parts, with convex margins.

QUINQUELOCULARE *pericarpium.* A five-celled pericarp: as in *Pyrola.*

QUINQUEPARTITUM *folium.* A five-parted leaf. Divided into five parts almoft to the bafe.—Applied to the perianth, in *Lithofpermum.*

QUINQUEVALVE *pericarpium.* A pericarp of five valves: as in *Hottonia.*

R

RACEMUS (from ῥαξ, ῥαγος, *acinus racemi*). A Raceme. — Anciently ſignifying a bunch of grapes, or other berries: in the Linnean language it is a ſpecies of inloreſcence, conſiſting of a peduncle with ſhort lateral branches. *Pedunculo ramis lateralibus inſtructo.* As in *Vitis* or Vine, *Ribes* or Currant, &c.

A Raceme may be—

1. Simple, or Compound.
2. One-ſided. *Unilateralis.* Having all the flowers growing on one ſide of the common peduncle.—*Secundus.* All bent or directed the ſame way.—Pedate—Conjugate.
3. Erect.—Looſe, *laxus.*—*Dependens,* hanging down.
4. Naked, or leafy.

RACHIS (Ραχις, *the back bone*) *ſpicæ.* The Spine. *Receptaculum filiforme floſculos longitudinaliter annectens in ſpicam.* Delin. pl.—*Receptaculum ſpicæ graminis cui flores inſculpti.* Regn. veg.—A filiform receptacle connecting florets longitudinally into

a ſpike:

a ſpike: as in *Panicum Crus corvi* and *Crus galli*, *Lolium*, and many other Graſſes.—It has the name from ſome reſemblance which it bears to the ſpine, when it is naked or deprived of the florets.

This term is alſo ſometimes uſed for the principal rib of a leaf.

RADIATA (*Radius*, a ray) *corolla*. *Radiatus flos*. A Radiate or Rayed corolla or flower.—A kind of compound flower, (in the claſs *Syngeneſia*) conſiſting of a diſk, in which the corollets or florets are tubular and regular; and of a ray, in which the florets are irregular. Theſe are moſt commonly ligulate: as in *Sunflower*, *Daiſy*, &c.—Sometimes however they alſo are tubular, but irregular; as in *Centaurea*. And ſometimes they are naked, or nearly ſo: as in *Artemiſia*, *Gnaphalium*.

Radiato-patens. Radiate-expanding: or, ſpreading out like rays. Applied to the ſtigma.

RADICALIS *pedunculus*. A root-peduncle; ſcarcely different from ſcape, but ſuſtaining only one flower. See *Scapus*. *Radicale folium*. A root-leaf. Proceeding immediately from the root.

Radicans *caulis.* A Rooting ſtem. *Altis ſe affigens radiculis lateralibus.*—Radicans folium. *Si folium radices agat.* See *Rooting.*

Radicatum *folium.* *Radiculas demittens e ſubſtantia ipſius folii.*— *Radicatus ſcapus;* ut in Droſera.

Radicula (dimin. from *Radix*, a root), a Radicle or Fibre. The fibroſe part of the root, by which the ſtock or main body of it is terminated; imbibing nouriſhment for the ſupport of the vegetable.

Radius. A Ray. *Pars exterior corollæ compoſitæ.*

Radix (from *Radius*, according to ſome; from *rado*, as others will have it; but more probably from the Greek ῥαδιξ, which however ſignifies a branch). *Alimentum hauriens, herbamque cum fructificatione producens.* Philoſ. bot.— *Organon nutriens plantam.* Delin. pl.— *Deſcendens, aquoſa ſorbens, nutriens.* Regn. veg.—See *Root.*

Ragged. See *Squarroſus.*

Ramentum (a *radendo*, q. *raſura*). A ſmall particle of any thing; as gold-duſt, ſaw-duſt, or little chips, &c. Applied by Linneus to the ſmall looſe ſcales that are frequently found on the ſtems of vegetables.

RAMEUM *folium. Rameus pedunculus.* A branch-leaf. A branch-peduncle. Growing on, or proceeding from a branch. In oppoſition to ſuch as proceed from the root, or axils, or grow on the ſtem itſelf.

RAMOSUS *caulis. Ramoſa radix.* A branched ſtem, or root. Having lateral diviſions. *Ramoſiſſimus.* Very much branched. *Ramis multis abſque ordine gravidus.*

RAMUS. A Branch. *Pars caulis.* A ſubdiviſion of the ſtem.

Ramulus. A branchlet, little branch, or twig. A ſubdiviſion of the branch.

RAY. *Radius.* The outer part or circumference of a compound radiate flower; or radiated-diſcous flower, as it is called by others.

Rayed. See *Radiata.*

RECEPTACULUM (*Recipio,* to receive). A Receptacle.—*Baſis qua partes fructificationis connectuntur.* The baſe by which the other parts of the fructification are connected.—By Boerhaave named *Placenta;* and by Vaillant *Thalamus.*

1. *Proprium.* A proper or peculiar receptacle: appertaining to one fructification only. *Commune.*

mune. A Common receptacle: connecting several florets or distinct fructifications, so that if any one of them be removed an irregularity is occasioned.—There are instances of this in the *Umbel*, *Cyme*, *Spadix* and *Rachis*, as well as in the *Compound flowers*.

2. *Recept. Fructificationis.* The Receptacle of the Fructification. Common both to flower and fruit; or embracing the corolla and germ.

Floris. Receptacle of the flower. The base to which the parts of the flower, exclusive of the germ, are fixed.

Fructus. Receptacle of the fruit. The base of the fruit only, remote from the receptacle of the flower.

Seminum. Receptacle of the seeds. The base to which the seeds are fixed: as in *Adonis*.

3. The Receptacle may be. *Nudum.* Naked. Without chaffs, hairs or bristles. *Punctatum.* Dotted.—*Pilosum.* Hairy.—*Setosum.* Bristly.—*Paleaceum.* Chaffy. — *Alveolatum* s. *favosum.* Honey-combed; divided into open cells, within each of which a single seed is lodged.

Planum. Flat.—*Convexum.* Convex.—*Subulatum.* Subulate or awl-shaped. — *Ovatum.* Ovate.

Ovate. — *Globosum.* Globular. — *Conicum.* Conical.

RECLINATUM *folium.* A reclined leaf. *Quod deorsum curvatur, ut apex fiat basi inferior; quibusdam etiam* Reflexum *dicitur.* Philos. bot.— *Deorsum-flexum, ut arcus sit basi inferior, apice adscendente.* Delin. pl. Bent downwards, so that the point of the leaf is lower than the base. The latter explanation seems very different; if I understand it rightly, as meaning that the bow is lowest at the base, and rises at the point. In Foliation, this term implies, that the leaves are bent downwards towards the petiole: as in *Podophyllum, Aconitum, Anemone, Adoxa.*

Reclinatus caulis. A reclined stem. Bowed towards the earth: as in *Ficus.*

RECTUS *caulis.* A straight stem. See *Straight.*

RECURVATUM *folium.* A recurved leaf. *Deorsum flexum, ut arcus superiora spectet.* Delin. pl. —Bent, or rather bowed or curved downwards, so that the bow or convexity is upwards. This term does not occur in *Philos. bot.*—Berkenhout explains it, but I know not on what authority — " bent downward in a greater de-

" gree

"gree than *reclinatum*, but not ſo much as *re-*
"*volutum*."

When applied to a Prickle, it is ſaid only to be bent outwards; in oppoſition to *incurvus*, bent in.—In the ſame ſenſe it is applied to the Awn, Petiole, Calyx, and Corolla.

REFLEXUS. Reflex. Bent back. Rami reflexi. *Perpendiculariter dependentes.* Delin. pl.—Hanging down perpendicularly.—*Reflexum folium.* A reflex leaf: as in *Euphorbia portlandica.*—*Reflexum perianthium.* A reflex perianth: as in *Aſclepias* and *Leontodon.*—*Reflexus flos. Reflexa corolla. Reflexa petala.* A reflex flower, corolla, or petals: as in *Lilium chalcedonicum, Cyclamen, Narciſſus triandrus*, &c.—Applied alſo to the ſtipule and bracte.—See *Retroflexus.*

REFRACTUS. Refracted. As it were broken.—Refracta corolla. *Recurvata angulo acuto.* Delin. pl. Bent back at an acute angle. See *Retrofractus.*

REGULARIS *corolla.* A regular corolla.—*Æqualis figura, magnitudine & proportione partium.* Equal in the figure, ſize and proportion of the parts: as in *Privet, Lilac, Jaſmin*, &c.

REMOTUS. Remote. Diſtant.—*Remota folia*: oppoſed to *approximate.*—*Remoti pedunculi* op-

 poſed

posed to *conferti.* — *Remoti verticilli* opposed to *contigui*, as in *Galeopsis Ladanum.*

Reniforme *folium.* A Reniform or Kidney-shaped leaf.—*Subrotundum, basi excavatum, angulis destitutum.* Philos. bot.—*Subrotundum, basi exsculptum absque angulis posticis.* Delin. pl.—Roundish, hollowed out at the base, without angles: as in *Convolvulus Soldanella*, the lower leaves of *Campanula rotundifolia, Saxifraga granulata, Glecoma hederacea.*—This term is applied also to the Anther and Seed.

Repandum *folium.* A Repand leaf. — *Cujus margo angulis, eisque interjectis sinubus, circuli segmento inscriptis terminatur.* The rim of which is terminated by angles, having sinuses between them inscribed in the segment of a circle.—In *Delin. pl.* it is differently described *margine flexuoso, tamen plano*: with a flexuose or waving rim, but flat. Properly speaking, says Dr. Berkenhout, having a serpentine margin, without any angles at all. But this by no means agrees with the first explanation from Linneus's *Philosophia Botanica.* —It is clearly distinct from the *Undulating* or *waving* leaf; for the curvature in that respects the disk; but in this, the edge only.

Repens *radix.* A creeping root.—*Longe excurrens*

rens hinc inde germinans, s. radiculas demittens.— Repens caulis: *radiculas hinc inde exserens procumbendo; ut in Hedera, Bignonia.*

Reptans flagellum. A runner. As in *Strawberry.* See *Creeping* and *Runner.*

Resupinata *corolla. Cum labium superius terram, inferius cœlum spectat.* When the upper lip faces the ground, and the lower lip the sky. Or, when that which is usually the upper lip (in a labiate corolla) becomes the lower; and the contrary: so that the flower is, as it were, turned upside down; or, in vulgar language, topsy-turvy. This is exemplified in *Scrophularia, Ocymum, Ajuga orientalis,* the European *Violets,* and some species of *Satyrium.*

Resupinatum folium. Pagina superiore inferiore, & contra inferiore superiore facta. A leaf is said to be *Resupinate* or turned upside down, when that which is commonly the upper surface becomes the lower; and the contrary.

Reticulata (dimin. from *rete,* a net) *corolla, petala.* A netted corolla. Netted petals. Having distinct veins crossing like net-work.— Beautifully exemplified in *Geranium striatum.*

Retro-

RETROFLEXUS. — Retroflex. — *Rami retroflexi: horsum vorsum divaricati.* Bending this way and that, in different directions, usually in a distorted manner. Thus it seems to differ from *Reflex*, which is only simply bent back at an angle. Dr. Berkenhout explains it to be three times bent, or bent in three different directions. But for this I know not that he has any warrant, either from the sense of the term, or the explanation. It does not occur in *Philosophia Botanica*.

RETROFRACTUS. Retrofracted. Applied to the Peduncle. — *Vi quasi ad dependentiam reductus.* Delin. pl.—Reduced to hang down as it were by force. So that it appears as if it had been broken.—I do not discover any reason why this and the foregoing term should have a different signification from *Reflexus* and *Refractus*.

RETUSUM *folium*. A Retuse leaf. *Quod terminatur sinu obtuso.* Ending in a blunt sinus: as in *Frankenia pulverulenta, Crotalaria retusa.*—Applied also to the seed in *Lycopus*.

REVOLUTUS. Rolled back or downwards.—*Revoluta vernatio s. foliatio.* Revolute foliation or leafing. *Quorum margines laterales utrinque retrorsum, s. versus paginam inferiorem spiraliter convol-*

convolvuntur. When the ſides of the leaves (in the bud) are rolled ſpirally back, or towards the lower ſurface. — *Revolutum folium.* A Revolute leaf. *Quod deorſum revolvitur.* — Having the edges rolled back or towards the lower ſurface: as in *Roſemary*, *Teucrium fruticans.* — *Revolutus cirrus.* A Revolute tendril. *Spira dimidio itinere retorta.* When a ſpire of the ſcrew, having made half a revolution, turns back in a contrary direction. — *Revoluta corolla.* A revolute corolla: having the petals rolled back, as in *Aſparagus*, *Medeola*, *Lilium chalcedonicum.* — *Revoluta valvula.* A Revolute valve. Turned back after it opens: as in the ſiliqua of *Cardamine.* — This term is oppoſed to *Involute* or rolled inwards.

Rhoeades ſ. Rhoeadeæ (from *Rhoeas*, Corn Poppy). The name of the thirtieth order in Linneus's fragments, and of the twenty-ſeventh in his natural orders; containing vegetables allied to the Poppy.

Rhombeum *folium.* A Rhombed or rhomb-ſhaped leaf. Having four equal ſides, but the angles not right angles: as in *Poplar.* — Linneus has not this term in his *Philoſophia Botanica*; but his Deltoid leaf ſeems ſcarcely to differ from it.

RHOMBOIDEUM *folium*. A Rhomboid leaf. Having the oppoſite ſides equal, and the angles not right ones: as in *Chenopodium viride*. This alſo ſeems included in the Deltoid leaf of *Philoſ. botan.*

RIB. *Coſta*. The continuation of the petiole along the middle of a leaf, and from which the veins take their riſe.

Ribbed. *Coſtatum*: which ſee.

RICTUS. The Gape. *Hiatus inter utrumque labium*. The opening between the two lips, in a labiate flower.

RIGIDUS. Rigid, ſtiff, impatient of bending: oppoſed to *laxus*. Applied to the ſtem, leaves and briſtles.—The ſtem is called *Rigoſus* in *Glinus dictamnoides*. Has this term the ſame meaning with the other? But *rigoſus* ſhould be derived from *Rigo*, not from *Rigeo*.

RIMOSUS. Rimoſe or Chinked. Abounding in cracks, clefts, or chinks; as the outer bark of ſome trees.

RINGENS (from ῥινες, *nares*, the noſtrils, whence *rictus*) *corolla*. A ringent corolla. *Irregularis in duo labia perſonata*.—*Monopetala irregularis*,

& limbo diviso in duo labia. Philos. bot. pl. 52, 135. An irregular one-petalled corolla, the border of which is usually divided into two parts, called the *upper* and *lower lip*. The first has sometimes the name of *Galea* or *Helmet*: the second of *Barba* or *Beard*. The opening between them is named *Rictus* or the *Gape*: the opening of the tube, *Faux*, the *Throat* or *Jaws*: the prominent swelling in the Faux is *Palatum*, the *Palate*: the upper part of the tube is *Collum*, the *Neck*. The Ringent corolla is exemplified in the class *Didynamia*. — See *Labiatus*.

Rising leaf or petiole. See *Assurgens*.

Rolled back. See *Revolutus*.

Root. *Radix*. That organ of a vegetable which draws in the nourishment, and produces the herb with the fructification. — It is composed of *Medulla* or Pith, Wood, inner and outer Bark: and consists of the *Caudex*, stock or main body; and the *Radiculæ* or fibres, by which the moisture is immediately imbibed. We commonly regard all that part of a vegetable only which is under ground as the Root; but Linneus comprehends the *ascending caudex*, or what we commonly term the body, trunk

or

or bole, within his idea. According to him, therefore, trees and ſhrubs are all root, except the leaves and fructification; and conſequently if a tree be turned upſide down, the deſcending caudex will produce leaves, and the aſcending caudex will put forth fibres.

A root in *Duration* is,

1. Annual. 2. Biennial. 3. Perennial.

In *Form*,

a. 4. Fibroſe. 5. Branching. 6. Fuſiform. 7. Præmorſe or bitten off.

b. 8. Creeping. 9. Jointed. 10. Toothed.

c. 11. Globular. 12. Tuberous. 13. Faſcicled or bundled. 14. Palmate.

d 15. Bulbous. 16. Granulate. 17. Tunicated. 18. Solid. 19. Scaly.

In *Subſtance*,

20. A Bulb. 21. A Tuber. 22. A Fibre. 23. A Fibril.

Rooting ſtem. *Caulis Radicans.* Bending to the earth and ſtriking root, but not creeping along. —A rooting leaf. *Folium radicans.* Shooting forth

forth roots; as in some aquatic plants: this is sometimes called *folium radicatum*.

ROOT-LEAF. *Folium radicale*. Proceeding immediately from the root, or growing next the ground: frequently different from the leaves on the stem and branches; as in *Campanula rotundifolia*.—Peduncles sometimes spring from the root, and may be named *Root-peduncles*.

ROOTLET, Radicle, or Fibre. See *Radicula*.

Root-leaf and Rootlet are more proper in English than Radical leaf and Radicle, on account of the analogy.

ROSACEA *corolla*. A Rosaceous or Rose-like corolla. A species of the Polypetalous; consisting of four or more regular petals, inserted into the receptacle by a short, broad claw; as in the wild Rose. This is a term of Tournefort's; and such flowers form his sixth class, entitled *Rosacei*.

ROSTELLUM (dimin. from *Rostrum*, a beak). The Rostel, or descending plane part of the Corcle or heart, in the first vegetation of the seed. —*Pars corculi simplex descendens*.

ROSTRATUS *fructus*. A beaked fruit. Having a pro-

a process resembling the beak of a bird: as in *Geranium*, *Scandix Pecten*.

Rotaceæ (*Rota*, a wheel). The name of the fifty-second order in Linneus's fragments; and of the twentieth in his natural orders.

Rotata corolla. A Wheel-shaped corolla. Monopetalous; spreading flat, without any tube: as in *Borago*, *Veronica*, *Lysimachia*. — Applied to the Nectary in *Narcissus poeticus*.

Rotundum *folium*. A round leaf. *Quod angulis privatur*. Philos. bot.—In p. 233. *Rotundatum* is opposed to *angulatum*. — By this term therefore Linneus does not mean a circular, or what we should call a round leaf, in English; but one which has a curve without any breaks for the circumscribing line. *Orbiculatum* is his term for circular or round.

Rotundo-trigonum. Obtusely three-cornered or three-sided with the corners rounded off: as in the germ of *Hyacinthus*.

Rough. *Asper*. Made synonymous with *Scaber* by Linneus. — He uses it however in a sense much more general.

Roughened. Exasperatus.—Applied to the calyx.

Round

Round and Rounded. *Rotundum* and *Rotundatum.* Bent into a curve. For Circular ſee *Orbiculatum.*

Roundiſh leaf. Folium ſubrotundum. Nearly circular. *Orbiculato proximum.* Which is improper. See *Rotundum.*

Rugged or Scabrous. *Scaber.* Rough with tubercles, or prominent ſtiffiſh points. Applied to the leaf and ſtem: alſo to the calyx of the Oak.

Rugosum *folium.* A Wrinkled leaf. *Cum venæ foliorum contractiores evadant quam diſcus, ut interjecta ſubſtantia adſcendat.* When the veins are more contracted than the diſk, ſo that the intermediate ſubſtance riſes above them. As in *Sage, Primroſe, Cowſlip, Ciſtus incanus,* &c.

Runcinatum *folium* (*Runcina,* a large ſaw). A Runcinate leaf. *Pinnatifidum, ita ut lobi antice convexi, poſtice ſint tranſverſi.* A ſort of pinnatifid leaf, with the lobes convex before, and ſtraight behind; like the teeth of the large double ſaw uſed in ſawing timber. Exemplified in common *Dandelion.* This term does not occur in *Philoſophia Botanica,* and was not originally diſtinguiſhed by Linneus from his Pin-

natifid leaf, of which it is only a variety.—*Runcina* feems rather to be a plane.

RUNNER. *Reptans flagellum.* A fhoot, producing roots and leaves at the end only, and thus propagating the plant: as in *Strawberry.* See *Sarmentofus.*

S

SABRE-SHAPED leaf. *Folium Acinaciforme.* See *Acinaciform.*

SAGITTATUM *folium* (from *Sagitta*, an arrow). A Sagittate leaf. Shaped like the head of an arrow.—*Triangulare, bafi excavatum, angulis pofticis inftructum.* Philof. bot.—*Triangulare, angulis pofticis acutis finu divifis.*—Triangular, hollowed at the bafe, with angles at the hinder part—or, with the hinder angles acute divided by a finus.—As in *Convolvulus arvenfis* and *fepium. Sagittaria. Rumex Acetofa*, or common Sorrel. *Erica vulgaris*, or common Heath.—This term is applied alfo to the Stipula and Anther.

SALVER-SHAPED. *Hypocrateriformis corolla.* Monopetalous, rising from a tube, with a flat border.

SAP. *Succus.* The juice or watery part of the vegetable.—Also the tender white part of the wood (*Alburnum*), in trees; newly formed from the *liber* or inner bark.

SARMENTACEÆ (*Sarmentum*, the twig or spray of a vine; from *sarpo* to prune, which is from the Greek αρπω, and that from αρπη, a pruning-knife). The name of the forty-ninth order in Linneus's fragments; and of the eleventh in his natural orders.

SARMENTOSUS *caulis.* A Sarmentose stem. *Repens subnudus.* Philos. bot.—*Filiformis geniculis radicantibus.* Delin. pl.—Filiform, almost naked; or having only leaves in bunches at the joints or knots, where it strikes root.—It seems to be in shrubs, what the runner is in herbaceous plants.

SCABER. Scábrous or Rugged; something like Shagreen.—*Punctis eminentibus rigidiusculis exasperatus.* See *Rugged.* Hence

SCABRIDÆ. The name of the twentieth order in

 Linneus's

Linneus's fragments; and of the fifty-third in his natural orders.

SCABRITIES. *Ruggedneſs. Componitur particulis, nudis oculis vix manifeſtis, quibus adſpergitur plantarum ſuperficies.*—A ſort of Pubeſcence, compoſed of particles ſcarcely viſible to the naked eye, ſcattered over the ſurface of vegetables.

Scabrous. See *Rugged.*

Scalloped leaf. This term may be applied to the *folium Repandum*, which ſee.

SCALY. *Squamoſus.* A Scaly root or bulb: compoſed of ſcales lying over each other; as in the *Lily.*—A ſcaly ſtem or peduncle: having ſcales ſcattered over it.

SCANDENS caulis. A Scandent or climbing ſtem. *Alta petens, aliis ſuſtinendus.* Weak and requiring ſupport in mounting; the claſper or tendril is uſually the agent; as in the Everlaſting Pea, and many other Leguminous plants.—It is different from *caulis volubilis*, which mounts by twining.

SCAPUS (from σκηπτω, to lean upon; whence σκηπτος, σκηπανιον, and σκηπτρον, and the Latin *ſcipio*, for a ſtaff; and *ſcapus*, the ſhaft of a column, and the

the ſtraight ſtalk of an herb reſembling it). A Scape. — According to Linneus — *truncus elevans fructificationem, nec folia.* — A ſtem bearing the fructification, without leaves: as in *Narciſſus, Pyrola, Hyacinthus,* &c. *Pedunculus* would with more propriety be rendered *Flowerſtalk* than this.

SCARIOSUM *folium.* A Scarioſe leaf. *Subſtantia ſicca arida tactu ſonora.* Of a dry ſubſtance, ſonorous to the touch. — Applied to a perianth, which is tough, thin, and ſemi-tranſparent; as in *Statice Armeria,* or Thrift, *Centaurea glaſtifolia,* &c.—Alſo to the nectary; in *Narciſſus poeticus*—*Spike,* &c.

SCATTERED. *Sparſus.* Applied to branches, leaves, &c. which come out without any apparent regular order. See *Sparſus.*

SCITAMINEÆ ſ. *Scitamina* (*Scitamentum* ſ. *Scitum edulium.* An eatable of a racy flavour, pleaſant ſpicy plants). The name of the third order in Linneus's fragments; and of the eighth in his natural orders. — In the artificial ſyſtem theſe are in the firſt claſs.

SCORED ſtem. *Exaratus caulis.* Marked deeply with parallel lines, or rather grooves.—It does

not ſeem to differ from *ſulcatus*, furrowed or grooved.

Scutellum (dimin. from *Scutum*, a buckler). *Fructificatio (Lichenum) orbiculata concava, margine undique elevato.*—An orbicular concave fructification (in ſome Lichens), with the edge raiſed all round.—The *Pelta* is flat.

Scymitar-ſhaped. See *Acinaciform.*

Scyphifer. Cup-bearing. A ſubdiviſion of the *Lichens*, having the fructification in an elevated obconical form, like a drinking-glaſs.

Secundus (*Sequundus, a ſequendo*, from following). *Floribus ad unum idemque latus verſis.*—All turned towards one ſide — directed or inclining the ſame way. We have no proper Engliſh term for this. *One-ranked* tends to miſlead, becauſe a plant may have more ranks or rows of flowers than one directed to the ſame point of the horizon, or nearly ſo. — It is exemplified in the flowers of *Erica herbacea*—in the ſpike of *Dactylis cynoſuroides*—and in the panicle of *Dactylis glomerata*, ſeveral of the *Feſtucæ*, &c.

Seed. *Semen.* The rudiment or embryo of a new plant. Or, the deciduous part of a vegetable,

table, containing the rudiment of another vegetable of the fame fpecies, vivified by the pollen. —It is analogous to the egg in animals.

A Seed confifts of three principal parts—1. The Tegument or fkin. 2. The Cotyledons or lobes. 3. The *Corculum*, Corcle or heart.—Some feeds alfo have a *Hilum* or eye—others an *Aril* —others again a coronet, *Coronula*: which is either the calyx adhering; a *Pappus* or Down; a wing, tail, hook, awn, or other procefs, to affift in their difperfion.

Seed-bud. See *Germen.*

SEED-LEAVES. The primary leaves; being the cotyledons or lobes of the feeds expanded, and in a ftate of vegetation.

SEED-VESSEL. *Pericarpium.*

SEGMENTA. Segments. The parts into which a calyx is cut.

SEGREGATA *Polygamia*. Segregate Polygamy. *Cum flofculi plures Calyce communi comprehenfi propriis Perianthiis etiam inftruuntur.* When feveral florets comprehended within a common calyx are furnifhed alfo with their proper perianths.— Thefe conftitute the fifth order of the clafs *Syngenefia.*

Sejugum *folium*. A sejugous leaf; or a pinnate leaf having six pairs of leaflets.

Semen. See *Seed*.

Semiamplexicaule *folium*. A half-stem-clasping leaf. Embracing the stalk half way.

Semicolumnar. See *Semiteres*.

Semiflosculus. A Semifloret. *Flos semiflosculosus*. A Semiflosculous flower, or a flower composed of semiflorets. These are terms of Tournefort's; and answer to the *corollula* and *corolla ligulata* of Linneus. Ray calls such compound flowers—*planipetali*. Hence

Semiflosculosæ or *Semiflosculosi*, the name of a subdivision in the order of compound flowers, both in the natural and artificial system of Linneus: comprehending such as are made up wholly of fertile ligulate florets; as *Dandelion*, *Lettuce*, *Sowthistle*, *Hawkweed*, &c.

Seminale folium. See *Seed-leaves*.

Seminatio. Semination, or the natural dispersion of seeds.

Semiorbiculatum *semen*. A semiorbicular seed. In shape of half a sphere.

SEMIQUINQUEFIDUS *calyx*. A half-five-cleft calyx.

SEMISAGITTATA *ſtipula*. Shaped like half the head of an arrow: as in *Ervum tetraſpermum*.

SEMISEXFIDUS *calyx*. Half-ſix-cleft.

SEMITERES. Semicolumnar. Flat on one ſide, and rounded on the other; as the ſtem of *Allium vineale*—and the leaves of *Narciſſus Jonquilla*. Linneus calls them *Semicylindracea*.— Applied alſo to the petiole.

SEMPERVIRENTIA *folia*. Evergreen leaves. This is an improper expreſſion: for though the plant be evergreen, the leaves are not ſo.

SENA *folia*. Six-fold leaves, or growing in ſixes; as in *Galium ſpurium*, &c. A ſpecies or variety of the Stellate leaf.

SENSILES ſ. *Senſitivæ plantæ*. Senſitive plants. *Situm partium tactæ mutantes*. Changing the ſituation of their parts when touched.

SENTICOSÆ (*Sentis*, a brier or bramble). The name of the thirty-fifth order in Linneus's fragments, and natural orders.

SEPIARIÆ (*Sepes*, a hedge). The name of the twenty-fifth order in Linneus's fragments; and

and of the forty-fourth in his natural orders: containing the hedge plants.

SERICEUM *folium*. A Silky leaf. *Tectum pilis appressis mollissimis*. Covered with very soft hairs pressed close to the surface.

SERRATUS (from *Serra*, a saw). Serrate, toothed like a saw — but not sawed. *Quod angulis acutis imbricatis extremitatem respicientibus notatur*. Having sharp imbricated notches about the edge, pointing towards the extremity. The direction of the notches is the essential character of the Serrate leaf. They are not always imbricate, and that circumstance is omitted in *Delin. pl.* — This term is applied to the leaf in *Vaccinium Myrtillus*, *Arbutus Unedo* and *alpina*, *Papaver orientale*, and many others.

When a serrate leaf has small serratures upon the large ones, it is said to be Doubly-serrate, *Duplicato-serratum*: as in *Elm*.

The term Serrate is applied also to the Calyx in *Hypericum*—to the Corolla in *Tilia*, *Alisma*—and to the Stipule.

Serrato-ciliatum folium. A Serrate-ciliate leaf. Having fine hairs, like the eye-lashes, on the serratures.

Ser-

Serrato-dentatum folium. A Serrate-toothed leaf. Having the ſerratures toothed.

Serrulatum folium. A ſerrulate leaf. Finely ſerrate, with very ſmall notches, or teeth.

SESQUIALTER *flosculus.* A Seſquialteral floret. When a large fertile floret is accompanied by a ſmall abortive one: as in *Aira villosa.* Haller applies this term to flowers in which the ſtamens are half as many again in number as the leaves or ſegments of the calyx or corolla.

SESSILE *folium.* A Seſſile leaf. Connected immediately with the ſtem or branch, without the intervention of a petiole: oppoſed to the Petioled leaf.—Applied to a flower which has no peduncle: as in *Trillium ſeſſile.*—To the Crown, *Pappus* or Down, which having no ſtipe is placed immediately on the ſeed: oppoſed to Stipitate or Stiped.

SETA. A Briſtle. A ſtrong, ſtiff, roundiſh hair. A ſort of pubeſcence.—Linneus alſo puts it for the ſcape of the capſule in Moſſes.

Setaceous. Briſtle-ſhaped. Having the thickneſs and length of a briſtle. Applied to the leaf; and to the leaflets or diviſions of the Calyx.

Setoſus.

Setosus. Bristly. Having the surface set with bristles. Applied to the Leaf and to the Receptacle. — These two terms are sometimes confounded, though nothing can be more distinct.

Sexangularis *caulis.* A hexangular stem: as in *Eriocaulon.*

Sexfidus *calyx.* Sexfid, or six-cleft; as in *Pavia.* —*Sexfidum nectarium.* A six-cleft nectary; as in *Narcissus minor.*

Sexloculare *pericarpium.* A six-celled pericarp: as in *Asarum, Aristolochia.*

Sexus. Sexes in vegetables are, 1. *Male.* 2. *Female.* 3. *Hermaphrodite.* Having the two first in the same flower. 4. When they are separate, either on the same or different individuals; such plants are called *Androgynous* 5. When Hermaphrodites are accompanied with one or both of the two first, such a plant is denominated *Polygamous.*

Shaft. Put by some authors for the style.

Shaggy. *Hirsutus.*

Sharp. *Acutus.*

Sharp-pointed or pointed. *Acuminātus.*

SHEATH. *Vagina.* A membrane investing a stem or branch; as in *Grasses.*—Very different from *Spatha*, which see.

Sheathed. *Vaginātus.* Invested by a sheath or cylindrical membranaceous tube, which is the base of the leaf: as the stem in *Polygonum amphibium*, and the culm in *Grasses.*

Sheathing. *Vaginans.* When a leaf invests the stem or branch by its base in form of a tube: as in *Polygonum*, *Rumex*, *Cistus incanus.*—Applied also to the Petiole and Stipule.

Shining. Lucidus.

SHRIVELLING, or Withering. *Marcescens.* Decaying without falling off: as the corolla of *Plantain.*

SHRUB. *Frutex.* In its general acceptation, it is a vegetable with several permanent woody stems, dividing from the bottom, more slender and lower than in trees. Linneus makes the distinction of a shrub from a tree to consist in its having no buds: but trees have not buds in hot climates. He acknowledges indeed that nature has placed no limits between them.

Shrubby.

Shrubby. *Fruticōsus.* Perennial, with several woody stems.

SICKLE-SHAPED. *Falcātus.* Applied to the keel of a papilionaceous flower.

SILICULA (dimin. from *Siliqua*). A Silicule, Silicle, little Pod or Pouch. A two-valved pericarp, having the seeds fixed along both sutures, and the transverse diameter equal, or nearly so, to the longitudinal. This pericarp varies in shape; being orbiculate, ovate, or flatted; entire at the end, or emarginate. Hence

SILICULOSA. The name of the first order in the class *Tetradynamia.*

SILIQUA. A Silique or Pod. An oblong, membranaceous, two-valved pericarp, having the seeds fixed along both sutures. — The *Silicula* does not differ from this essentially, but only in form and size. Accordingly Linneus, in *Philos. bot.* gives an explanation common to both—*Pericarpium bivalve, affigens semina secundum suturam utramque*—and makes no mention of *Silicula.* — The proper *Silique* is two-celled, having a partition running the whole length of it. Some pericarps however, having the

the fame form, take the fame name, although they have no partition, and are therefore one-celled; as in *Fumaria*, and *Chelidonium*.—When *antique*, *critique* and *burlefque* were firft introduced into our language, they were written *antick*, *critick* and *burlefk*: had this orthography obtained, we fhould have written this pericarp *Silick*, and thus have avoided the French termination. I fhall not contend with any one who would retain the Latin final; nor with any other who would appropriate the Englifh term *Pod* to this, exclufive of the Legume.

SILIQUOSA. The name of the fecond order in the clafs *Tetradynamia*: containing thofe plants which have a proper *Siliqua* for a pericarp.

SILIQUOSÆ. The name of the fifty-feventh order in Linneus's fragments; of the thirty-ninth in his natural orders; and of the twentieth clafs in Ray's method. They are the fame with the *Cruciformes* of Tournefort.

SILKY leaf. *Sericeum folium*. Covered with a fine pile of foft clofe-preffed hairs, fo as to be very fmooth to the touch.

SIMPLEX. Simple. Undivided.—*Simplex Radix.* A Simple root. Not fubdivided. Oppofed to branched.—*Simplex caulis.* A Simple ftem. *Continuata ferie verfus apicem extenditur.* Extended in one continued feries from the bottom to the top. Oppofed to *Compofitus* or Compound.—*Simplex folium.* A fimple leaf. Having only one on a petiole. Oppofed alfo to Compound.—*Simplex Fructificatio f. Flos.* A Simple fructification or flower; in oppofition to that which is compofed of feveral florets.—A Simple fpike. Having no fubdivifions, fpicules or fpikelets.—A Simple Umbel. Having only one fet of rays, or having the receptacle divided once only: as in *Anthrifcus Pecten.*—*Simplex Calyx.* A fimple calyx. Having only one row of leaflets, as in *Tragopogon;* oppofed to *Calycled* and *Imbricate.*—*Simplex Pappus.* A fimple down: oppofed to *Plumofus* or feathered.—Applied alfo to Briftle, Tendril, Stigma, &c.

Simpliciffimus. Very fimple, abfolutely fimple.—As the ftem of *Lathræa Squamaria*, and the fpadix of *Acorus.*

SINGLE flower. *Unicus flos.* Only one on a ftem, as in the *Tulip;* oppofed to many.—In common

common language, it is uſed in oppoſition to a double or monſtrous flower.

Sinuatum *folium*. A Sinuate leaf. Having large curved breaks, in the margin, reſembling bays (*Sinus*). As in the *Oak*.

Sinuato-anguloſum. A ſinuate-angular leaf: as in *Hollyhock*.

Sinuato-dentatum. A ſinuate-toothed leaf.

Sitting. See *Seſſile*.

Situs *foliorum*. Situation of leaves. Their diſpoſition on the ſtem: as *ſtellate*, *tern* or *three-fold*, &c. *Oppoſite*, *alternate*, *ſcattered*, *crowded*, *imbricate*, *faſcicled* or in bundles, *diſtich* or in two rows.

Six-petalled. *Hexapetala corolla*. A flower having ſix diſtinct petals to the corolla.

Skinny. See *Scarioſum*.

Sleep of Plants. *Somnus plantarum*. The form and appearance which plants put on during the night, very different from what they have in the day; chiefly in the leaves.

Slender. *Tenuis*. Applied to the ſeed. *Tenuifolia planta*. A ſlender-leaved plant: in oppo-

ſition to *latifolia*, broad-leaved.—*Tenuis* however is often put for *thin*.

Smooth. *Glaber*. Having a ſlippery ſurface void of roughneſs. Oppoſed to ſcabrous, not to *piloſus*, hairy; and exemplified in *Daphne Laureola*, *Arbutus Unedo*, *Geranium peltatum*, &c. Greater degrees of ſmoothneſs are expreſſed by *nitidus* or *nitens* and *lucidus*; ſhining, bright, glittering, gloſſy, &c.

Snipt leaf. *Folium inciſum*. See *Gaſhed*.

Solares Flores. See *Vigiliæ*.

Solidus *bulbus*. *Solida radix*. A ſolid bulb; as in *Tulip*. A ſolid root; as in *Turnep*. Of a fleſhy, uniform, undivided ſubſtance.—*Solidus caulis*. A ſolid ſtem. Full within; in oppoſition to *inanis*, which has only a light ſpongy ſubſtance in it; and *fiſtuloſus*, hollow like a pipe.

Solitarius. Solitary, ſeparate, one only in a place. *Solitaria ſtipula*. A ſolitary ſtipule; as in *Melianthus*.—*Solitarius pedunculus*. A ſolitary peduncle; as in *Convolvulus tricolor*.—*Solitarius flos*. A ſolitary flower: one only to each peduncle; as *Euphorbia Peplis*, *Dianthus chinenſis*.

chinenſis. — *Solitarium ſemen.* A ſolitary ſeed: one only in a pericarp.

SOLUTUS. *Looſe.* Oppoſed to *adnatus.* Applied to Stipules.

SOMNUS *Plantarum.* Sleep of Plants. *Eſt forma facieſque, quam plantæ ſub nocte induunt, maxime a diurna earum facie diverſam, nulla habita ratione partium internarum ſeu fructificationis. Eſtque in foliis præſertim conſpicuus.*

SPADIX. The receptacle in Palms, and ſome other plants, proceeding from a ſpathe.—It is either branched, as in *Palms;* or ſimple, as in *Dracontium,* &c. — In ſome it is one-flowered; in others many-flowered.—Hence

Flos ſpadiceus. A ſpadiceous flower. A ſort of aggregate flower, having a receptacle common to many florets, within a ſpathe.—As *Palms, Arum, Calla, Dracontium, Pothos, Zoſtera, Acorus.*

Spadiceus color. The colour of the ſpadix in the Palm; it is commonly tranſlated a *Bay-colour,* from the Greek βαιος.

SPAN. A long ſpan or *Dodrans*—a ſhort ſpan or *Spithama.* See *Meaſures.*

Sparsus. Scattered. Neither oppoſite nor alternate, nor in any apparent regular order. Applied to branches—to leaves, as in ſeveral ſorts of Lily—to peduncles or flowers—to calycine ſcales, as in *Crepis barbata*. "With regard to "branches," ſays Dr. Berkenhout, "an accu-"rate obſerver will find, that notwithſtanding "their irregular appearance, they form a ſpiral "line round the trunk, regularly completing "the circle in a determinate number of "ſteps."

Spatha. A Spathe (Sheath is the Engliſh term for Vagina). The calyx of a ſpadix, opening or burſting longitudinally, in form of a ſheath.—It is applied alſo to the calyx of ſome flowers which have no ſpadix; as *Narciſſus*, *Crocus*, *Iris*, &c.

A Spathe may be—

One-valved, or two-valved.

Halved. *Dimidiata*. Inveſting the fructification on the inner ſide only.

Imbricate.

One-flowered, two-flowered, &c.—Hence

Spathaceæ. The name of the eighth order in Linneus's fragments; and of the ninth in his natural orders.

Spa-

SPATULATUM *folium.* A Spatulate, or Spatula-ſhaped leaf. *Cujus figura ſubrotunda, baſi anguſtiore lineari elongata.* Roundiſh, with a long, narrow, linear baſe: like a ſpatula or a battledore: as in *Ciſtus incanus.*

Spear-ſhaped. See *Lanceolatum.*

SPECIES. The diſtinct forms of vegetables originally ſo created, and producing, by certain laws of generation, others like themſelves.—There are therefore as many ſpecies as there are different invariable forms or ſtructures of vegetables now exiſting. We commonly uſe the ſame termination both in the ſingular and plural, as we do in ſome other words of the ſame ſtructure from the Latin. The duplication of the final is diſagreeable to the ear, and I ſuppoſe that we acquieſce the more readily in this anomaly, becauſe ſo many of our plurals terminate in *es.*

Specific Character. A circumſtance or circumſtances diſtinguiſhing one ſpecies from every other ſpecies of the ſame genus.

Specific Name. Prænomen triviale. Commonly called the Trivial Name.—One of thoſe happy inventions of Linneus, by which he has facilitated

litated and diffufed the fcience of Botany in a wonderful manner.—A plant is perfectly named, fays Linneus (Philof. bot. 202), when it is furnifhed with a *generic* and *fpecific* name.—In the fame page he diftinguifhes the latter from the *nomen triviale*; and calls it the Effential Difference.—*Nomen fpecificum legitimum plantam ab omnibus congeneribus diftinguat; triviale autem legibus etiamnum caret.—Nomen fpecificum eft itaque Differentia effentialis.*

Spica (from *Spes*, hope; from σπιζω, *to extend*; or from σπαχυς Æol. for ϛαχυς, whence *Spicus*, *Spica*, and *Spicum*; for it is ufed in all the three genders). A Spike.—*Flores feffiles fparfim alterni in pedunculo communi fimplici.*—In Term. bot. 461, *fparfim* is omitted.—A fpecies of inflorefcence, in which feffile flowers are (fcatteringly) alternate on a common fimple peduncle.—As in an ear of *Wheat*, *Rye*, or *Barley*; many of the *Graffes*; in *Lavender*, *Mullein*, *Agrimony*, &c.—A Spike is

1. Simple, Diftich, Compound, Glomerate.
2. Ovate, Cylindric, Ventricofe, Interrupted.
3. Imbricate, Jointed, Branching, One-ranked (*fecunda*), Linear, Ciliate, Leafy, Briftle-fhaped, Comofe or terminated with a bufh of leaves, Scariofe.

Spicula.

SPICULA. A Spicule or Spikelet. A partial ſpike, or a ſubdiviſion of it: as in ſome *Graſſes*.

SPINA. A Spine or Thorn.—*Mucro e ligno plantæ protruſus.*—*Fulcrum terminans cornu ligneo ſo.* *Regn. veg.*—See *Thorn.*

SPINDLE-SHAPED root. See *Fuſiformis.*

Spineſcens. Spineſcent. Becoming hard and thorny. Incident to petioles and ſtipules.

Spinoſus. Spiny or Thorny.—*Spinoſum folium. Quod margine exit in acumina duriora, rigida, pungentia.* Oppoſed to *Inerme.*—Spinoſus caulis. *Spinis armatus.*

SPIRALIS. Spiral. Twiſted like a ſcrew. As the cotyledons of the *Holeraceæ*; the anthers of *Chironia*; the tails of the ſeeds in *Geranium*, &c.

SPITHAMA. A ſhort Span, or ſeven Paris inches. See *Meaſures.*

SPREADING. *Patens.* Spreading a little, *Patulus.* See theſe two words.

SPUR or Horn. *Calcar, Cornu.* The hinder part of the nectary in ſome flowers, ſhaped like a cock's ſpur, or a horn.—This kind of nectary

is called *Nectarium calcaratum*; and a corolla having ſuch a nectary is named *Corolla calcarata*; as in *Larkſpur*, *Orchis*, &c.—A calyx having ſuch a ſpur is called *Calyx calcaratus*; as in *Tropæolum*.

Squamosus ſ. Squamatus (*Squama*, a Scale). *Bulbus*, *Caulis*. See *Scaly*.

Squarrosus (*A ſquamarum piſcium ſimilitudine, quorum cutis exurgat ob aſſiduam inluviem*.

Varronum ac rupicum ſquarroſa incondita roſtra.
Lucilius.

Or, according to others, from *Squarra*, anciently written *Scara*, which is from the Greek εσχαρα, ſcurf). Squarroſe, by ſome tranſlated Ragged. Squarroſus calyx. *Ex ſquamis undique divaricatis patentiſſimis*. Conſiſting of ſcales very widely divaricating or ſpreading every way: as in *Carduus*, *Onopordum*, *Conyza*, *Achyranthes muricata*. — Squarroſum folium. *In lacinias elevatas nec plano parallelas diviſum*. Divided into ſhreds or jags, raiſed above the plane of the leaf, and not parallel to it.

Stalk, or Stem. *Caulis*. See *Stem*.

Stamen. A Stamen; in the plural Stamens, not Stamina, in Engliſh. — *Viſcus pro pollinis* pre-

preparatione.— *Viscus exterius e ligno. Genitale masculum.* Regn. veg. — An organ or viscus for the preparation of the pollen; and formed, according to Linneus, from the wood.—It is the third part in the fructification; and consists of the *filament* and *anther*.—Some English writers call it the *Chive*.

Stamineus flos. A stamineous flower. Having no corolla: a term used by Ray. *Apetalus* is the term which Linneus has adopted from Tournefort. Others call such flowers Imperfect or Incomplete.

Staminiferus flos. A staminiferous flower. Having stamens without a pistil. The same with the male flower of Linneus. — *Staminiferum nectarium.* A nectary having stamens growing on it: as in *Kleinhovia*.

STANDARD or Banner. *Vexillum.* The upper petal of a papilionaceous corolla: as in the *Pea*.

STATUMINATÆ (from *Statumen*, a prop or support, as the stakes put to vines, &c. from *statuo*). The name of the sixty-first order in Linneus's fragments of a natural method, in *Philosophia Botanica*; containing only *Ulmus, Celtis, Bosea*.

STELLATA (*Stella*, a star) *folia*. Stellate leaves.

Cum

Cum folia plura quam duo verticillatim caulem ambiunt. When more leaves than two (feldom fewer than four, frequently fix, eight or more) furround the ftem in a whirl; or radiate from the ftem like the fpokes of a wheel; or like a ftar, as it is vulgarly reprefented: exemplified in *Galium.* They are otherwife called *Verticillata;* and come out regularly in fets one above another.—*Stellata feta.* A Stellate Briftle. When a little ftar of fmaller hairs is affixed to the end.— Applied alfo to the Stigma: as in *Afarum.*—*Stellatus flos.* A Stellate flower. The fame with the *Radiatus* of Tournefort, which Linneus has adopted.

Stellatæ. The name of the forty-fourth order in Linneus's fragments, in *Philof. bot.*—and the forty-feventh in his natural orders, at the end of *Gen. pl.*—The name of a clafs alfo in Ray's and Herman's methods.

Stem or Stalk. *Caulis.* The body of an herb, bearing the branches, leaves and fructification. —According to Linneus, *Truncus* is the generic term, of which *Caulis* is a fpecies: but in Englifh we apply Trunk to the body of a tree, and *Stalk* to that of herbaceous plants.— *Stem* might be adopted as the generic term. See *Truncus.*

Stem-clasping. Amplexicaulis. Applied to a leaf (*folium amplexicaule*), when the base surrounds the stem: as in *Potamogeton perfoliatum*, *Verbascum Blattaria*, *Hyoscyamus niger*, &c.—Applied also to the petiole.

Stem-leaf. *Folium caulinum.* Inserted into the stem. Opposed to the radical or root-leaf. Applied also to the peduncle.

Stemless. Acaulis. Having no stem, properly so called. Opposed in *Philos. bot.* (p. 233) to *Caulescens.*

Sterilis flos. A Barren flower. A term of Tournefort's. Called *Masculus flos*, or Male flower, by Linneus.—Ray calls it *Paleaceus*, and others *Abortiens*, and *Staminiferus*.

STIFF. *Rigidus.* Impatient of bending. See *Rigidus* and *Strictus*.

STIGMA. (From Στιζω, *inuro*, to brand or mark.) A Stigma.—*Summitas pistilli madida humore Pollen rumpendo—Roridum, pubescens, supremum.* Regn. veg.—The top of the pistil, pubescent and moist, in order to detain and burst the Pollen or prolific powder.—Grew named it the *Knob* or *Button*; and Withering the *Summit.*—

mit.—I have fometimes afked myfelf, how Linneus came not to adopt the more elegant, claffical term of *Fibula*, which had been given to this part of the piftil by fome authors who wrote before him?

The Stigma differs in number, figure, and ftructure.—It is

Simple or *divided.*

Acute; ending in a fharp, fingle tip.

Perforated; having a cavity in the middle.

Capitate; fhaped like a head, or globular.

Peltate; or fhaped like a round buckler; or like the foregoing, flatted by the ftroke of a hammer.

Bilamellate; Capitate or globular, compreffed, and longitudinally bifid.

STIMULI (q. *Stigmuli*, from στιγμος). Stings.

In *Philof. bot.* a fpecies of pubefcence; defined to be—*punctura venenata quæ animalia nuda arcent.* Exemplified in *Urtica* or *Nettle*, *Iatropha*, *Acalypha*, *Tragia*.—In *Term. bot.* 393, they are feparated from *Pubes*, and enumerated with thorns and prickles, among *Arma*, the defences of plants againft animals.—They are thus defined—

ſined—*mucrones puncturas inflammatorias efficientes, unde pruriginoſæ evadunt partes.* Proceſſes or ſharp points from a plant, producing inflammatory itching punctures. — They are uſually on the ſtem or leaf; which is then called *Urens.*

Stipes (*στυπος, a ſtake*). A ſtipe. *Baſis frondis. Proprius Palmis, Filicibus, Fungis.* — *Truncus in folia tranſiens.* Delin. pl. — *A folio non diſtinctus.* Regn. veg. — The baſe of a frond: or, a ſpecies of ſtem paſſing into leaves, or, not diſtinct from the leaf. The ſtem of a Fungus is likewiſe called *Stipes.*

It is alſo put for the thread or ſlender ſtalk, which ſupports the *pappus* or down, and connects it with the ſeed. *Filum elevans connectenſque Pappum & Semen.*

Stipitatus. Stipitate or Stiped. Elevated on a Stipe. Applied to the *pappus* or down.

Stipula (dimin. from *Stipa*, which is from *στυπη, tow*). A Stipula or Stipule. —*Squama baſi petiolorum enaſcentium adſtans.* A ſcale at the baſe of the naſcent petioles — or peduncles, according to *Philoſ. bot.* —As in *Papilionaceæ, Tamarindus, Caſſia, Roſa, Melianthus, Liriodendron,*

Abricot,

Abricot, Peach, Bird-cherry, &c.—Some natural classes have no stipules; as the *Asperifoliæ, Personatæ, Verticillatæ, Stellatæ, Siliquosæ, Liliaceæ, Orchideæ,* and most of the *Compositæ.*—

Stipules are,

1. In pairs; Solitary; or None.
2. Lateral; Extrafoliaceous; Intrafoliaceous; Oppositifolious.
3. Caducous; Deciduous; Permanent; Spinescent.
4. Sessile; Adnate; Decurrent; Sheathing.
5. Subulate; Lanceolate; Sagittate; Lunate.
6. Erect; Spreading; Reflex.
7. Very Entire; Serrate; Ciliate; Toothed; Cleft.
8. Very Short; Middling; Long.

Stipularis s. *stipulacea gemma.* A Stipular bud. Formed of stipules or scales.

Stipulares glandulæ. Glands growing on stipules, or close to them.

Stipulatio. Stipulation. The situation and structure of the stipules.

Stipulatus caulis. A Stipulate or stipuled stalk. Having stipules on it.

STOLO. A Sucker or Scion. See *Sucker.*

Stoloniferus caulis. A Stoloniferous ſtem. Putting forth ſuckers.

Straddling. Put by Dr. Withering for *Divaricatus.*

STRAIGHT ſtem. *Rectus caulis.* Making one right line; not bent. — *Erectus* is upright, or perpendicular to the horizon. — *Rigidus* is ſtiff, difficult to bend. — *Strictus* is both ſtiff and ſtraight.

Straightiſh. Rectiuſculus.

STRAP. *Ligula.* An appendage to the leaf in ſome Graſſes. — Alſo the flat part of the corollet in ligulate florets.

Strap-ſhaped. See *Ligulatus.* Dr. Withering has given this name to the linear leaf.

STRIATUS. Striated or Streaked.—Striatus caulis, culmus. *Lineis tenuiſſimis excavatis inſcriptus.* Stalk or Culm — marked or ſcored with ſuperficial or very ſlender lines. In the explanation of the Striated leaf the word *parallel* is added.

STRICTUS (*Strings*, to tie faſt). Stiff and ſtraight. Strict will not do in Engliſh, and I do not recollect that we have any one word to expreſs this

this idea. Straight is put for *rectus*, and Stiff for *rigidus*.—Linneus in one place refers *Stricta* (*folia*) to *Recta*; adding, that it ſtrengthens the ſignification, and means the ſame as *Rectiſſima*. Philoſ. bot. p. 219.—In another place (p. 233), he oppoſes *ſtrictus* to *laxus*, *flaccidus*.—In *Term. bot.* 28, *Erectus* is explained to be a ſtem riſing in almoſt a perpendicular direction—*Strictus*, (29), to be altogether perpendicular without bending.—I do not conceive that this term has any thing to do with perpendicularity of direction.

It is applied to the ſtem in *Aſtragalus ſulcatus*, &c.—to the culm—branch—leaves, in *Campanula patula*—and to the peduncle.

Strictiſſimus. Very ſtiff and ſtraight. Applied to branches.

STRIGA (from *Strigo* for *Stringo*). In *Term bot.* 363, *Strigæ* are thus deſcribed—*pili rigidiuſculi planiuſculi*.—In *Philoſ. bot.* Linneus only ſays—*arcent ſetis rigidis animalcula & linguas*; and gives for examples *Cactus*, *Malpighia*, *Hibiſcus*, *Rubus*.—They ſeem to be, ſtiffiſh flattiſh briſtles—and from the derivation we ſhould ſuppoſe that they grow in a ſort of order or rank. Their uſe is to keep off the ſmaller animals, and the tongues of larger ones, from injuring the

the plants.—We have no Engliſh name for this term.

Strigosus (from *Strigo*). *Strigoſum folium.* A Strigoſe leaf. *Aculeis lanceolatis rigidis.* Set with ſtiff lanceolate briſtles. *Term. bot.* 246. In *Philoſ. bot.* Linneus refers to *Hiſpidum.* Dr. Berkenhout interprets it, lank, lean, or drawn up as if hide-bound; I know not on what authority, but probably miſled by one ſenſe of the verb *ſtrigare*, which is to leave a furrow unfiniſhed in ploughing; whence a horſe or ox unable to go through his work was called *Strigoſus.*

Strobilus. A Strobile. *Pericarpium ex Amento factum—ſquamis induratis*, is added in *Term. bot.* 618.—A Pericarp formed from an Ament—by the hardening of the ſcales.—In *Regn. veg.* it is thus expreſſed—Strobilus *imbricatus Amenti coarctati.* That is, a Strobile is made up of ſcales that are imbricate, or lie over each other, from an Ament contracted or ſqueezed together, in this ſtate of maturity.—This term includes not only the Cone of former writers, but alſo ſome other fruits which recede conſiderably in ſtructure from that ſort of pericarp; as that of *Magnolia.* To tranſlate *Strobilus* therefore by *Cone* is improper, as creating confuſion.

Strobiliformis spica. A Strobile-shaped spike: as in *Justicia Ecbolium.*

STYLUS (from στυλος, *a column*). The style. *Pars pistilli, stigma elevans a germine*—or, as it is expressed in another passage of Philos. bot.—*pes stigmatis, connectens illud cum germine.* The middle portion of the pistil, connecting the stigma with the germ. — It is called by some English Botanists the *Shaft.*—We are to attend to the number, proportion, situation, division and figure of Styles.

The most common figures are—1. *Capillary,* or hair-shaped. 2. *Filiform,* or thread-shaped. 3. *Cylindric.* 4. *Subulate,* or awl-shaped. 5. *Clavate,* or club-shaped.

In situation they may be—1. *Erect,* or upright. 2. *Declined,* or bending down. 3. *Ascending,* or bending up.

SUB, in composition, is used frequently by Linneus for *almost, nearly, somewhat, thereabouts, approaching to, most commonly.* We must consider the meaning of the word to which it is the prefix, in order to determine which of the English Adverbs we should prefer. In some cases perhaps we may preserve the Latin prefix: in others we may use the English termination

tion *ish*: as *subrotundus*, *roundish*. Though it were to have been wished, for distinction sake, that we might express the Latin *sub* by some of the foregoing adverbs; and the diminutive termination *usculus* by *ish*. Thus *subobtusus*, somewhat blunt; *obtusiusculus*, bluntish.—The following are some instances of the use of *sub*, among many:

Subacaulis. Almost without stem.

Subæqualis. Nearly equal.

Subamplexicaulis. Slightly embracing the stem.

Subcordatus. Subcordate. Somewhat heart-shaped.

Suberosus. As if a little eaten or gnawn.

Subexcedens. A very little longer.

Sublanatus. Somewhat woolly.

Subnudus. Almost naked.

Suborbiculatus. Almost orbiculate.

Subovatus. Subovate. Almost or nearly ovate.

Subpetiolatus. Scarcely petioled, or with a very short petiole.

Subramosus. Having only a chance branch or two.

Subrepandus. Somewhat repand.

Subsessilis. Subsessile, or almost sessile.

Subtrifidus. Slightly trifid.

Subuniflorus. Having one or two flowers only, or most commonly one—one or thereabouts.

Sometimes however *Sub* has the common meaning of *Under*: as *folium submersum* is a leaf growing under water. *Herbæ submarinæ.* Herbs growing at the bottom of the sea.—*Subdivisus* does not mean somewhat or a little divided, but *divided again*, in the usual sense of our English *subdivided.*

Suberosus (*Suber, cork*). Corky, like cork. Applied to a stem clothed with a bark, soft and elastic like cork.—To be carefully distinguished from *sub-erosus*, which is applied to leaves which have little irregular sinuses on their edges, giving them the appearance of having been gnawed by insects. Applied also to the stem in *Aristolochia peltata.*—In this case it seems better to drop this equivocal term, in English.

Substantia. The substance of a vegetable consists of the *Epidermis* or Cuticle, covering the *Cortex* or Outer Bark, depositing from its inner

surface

furface the *Liber* or Inner Bark, which changes gradually into hard rings of *Wood*, clothing the *Medulla* or Pith. — Or, taking it the other way; it is the *Medulla* or Pith clothed by the wood, which is formed from the *Liber*, feparating from the *Cortex*, and covered by the *Epidermis*.

Subulatus (*Subŭla*, an awl). Subulate, or awl-fhaped (not awled). *Folium fubulatum*. A fubulate leaf. *Inferius lineare, at verfus apicem attenuatum*. Linear at bottom, but gradually tapering towards the end. As in *Arenaria faxatilis*, *Sedum rupeftre*.—Applied alfo to the Filament, in the clafs *Didynamia*, &c.—to the fcales of the Calyx, in *Dianthus chinenfis*—to the Stipule, Anther, Style and Receptacle.

Succulentæ (*fuccus*, juice). The name of the forty-fixth order in Linneus's fragments, and of the thirteenth in his natural orders.

Succulentum *folium*. A Succulent leaf. Full of juice; in oppofition to *Exfuccum*, juicelefs or dry. Applied alfo to the Drupe, as in the Plum or Peach; oppofed to *Sicca*, dry, as in the Almond.

Sucker. *Stolo*. A fhoot from the root of a vege-

vegetable, by which it may be propagated: as in *Violet*, *Ranunculus repens*, and most *Shrubs*. See *Runner* and *Sarmentosus*.

Suffrutex (*Sub* under, and *Frutex* a Shrub). An Undershrub. Permanent or woody at the base, but the yearly branches decaying; usually of a lower growth than the *Frutex* or Shrub: as in *Lavender*, *Sage*, *Thyme*, &c.

Suffruticosus. Suffruticose, Undershrubby.

Sulcatus (*Sulcus*, a furrow) *Caulis*, *Culmus*. A Furrowed, grooved or fluted stem or culm. Scored with deep broad channels longitudinally. —Applied also to succulent leaves.

Superficies. The surface or disk of a leaf.—The upper surface is called *Pagina superior*, or *discus supinus*: the lower, or back of the leaf, *Pagina inferior*, or *discus pronus*.

Superflua *Polygamia*. Superfluous Polygamy. The name of the second order in the class *Syngenesia*: wherein the florets of the disk are hermaphrodite and fertile; and the florets of the ray, though female only, are also fertile.

Superus *flos* s. *calyx*. A Superior flower or calyx. Having the receptacle of the flower above

above the germ.—*Superum germen.* A ſuperior germ. Included within the corolla: this muſt have an inferior calyx; and the contrary.

Supinus *diſcus folii.* The upper ſurface of a leaf.

Support. See *Fulcrum.*

Supra-axillaris. See *Supra-foliaceus.*

Supra-decompositum *folium.* A Super-decompound leaf. *Cum petiolus aliquoties diviſus adnectit plurima foliola.* When a petiole divided ſeveral times connects many leaflets; each part forming a decompound leaf: as in *Pimpinella glauca, Ranunculus rutæfolius.* — *Tergeminate, Triternate,* and *Tripinnate* leaves are ſpecies of this; and are explained in their proper places.

Supra-foliaceus ſ. *Supra-axillaris pedunculus,* ſ. *flos.* A peduncle or flower inſerted into the ſtem above the leaf, or petiole, or axil.

Surculus. A little branch or twig. *Quod in ramis ſimplex aſſurgit tenerum & exile.*—A ſhoot. —It is probably a diminutive from *Surus* or *Surrus,* an old word for a large branch, ſuch as was fit to make a ſtake or paliſade of. The

 original

original word was probably *Surcus* from *Surgo*, which was anciently *Surco*.—Linneus puts *Surculus* for a branchlet of Mofs.

Swimming or Floating leaf. *Natans*. Lying on the furface of the water.

Sword-shaped leaf. *Folium Enfiforme*. See *Enfiform*.

Syngenesia (συν and γενεσις, *congeneration*). The name of the nineteenth clafs in Linneus's artificial fyftem; comprehending thofe plants which have the anthers united into a cylinder. —The orders are fix — 1. *Polygamia Æqualis*. 2. *Polygamia Superflua*. 3. *Polygamia Fruftranea*. 4. *Polygamia Neceffaria*. 5. *Polygamia Segregata*. 6. *Monogamia*. — The five firft orders contain the Compound flowers, and form a Clafs truly Natural.

Systema. A Syftem is a regular arrangement of natural bodies, according to fome certain characters.—In Botany it confifts of five members or divifions—1. Clafs. 2. Order. 3. Genus. 4. Species. 5. Variety.

TAIL.

T

TAIL. *Cauda.* A proceſs or thread terminating a ſeed, and facilitating its propagation.—This term was uſed formerly for the narrow baſe of a petal in a polypetalous corolla, which Linneus calls *Unguis*, the Claw.

Tapered or Tapering. See *Attenuatus.*

Target-ſhaped. See *Peltate.*

TENDRIL or Claſper. *Cirrus.* One of the Fulcres. A filiform ſpiral band, by which a plant is faſtened to another body—or by which a weak plant ſupports itſelf on others: as the Vine, Pea, &c.

A Tendril is,

1. *Axillaris*, from the axil.
2. *Foliaris*, from the leaf.
3. *Petiolaris*, from the petiole or foot-ſtalk.
4. *Peduncularis*, from the peduncle or flower-ſtalk.

Or it is,

1. *Simple.*
2. *Trifidus*, or three-cleſt.

3. *Multifidus*, many-cleft.

4. *Diphyllus*, *tetraphyllus*, &c. Two-leaved, four-leaved, &c.

5. *Polyphyllus*, many-leaved.

6. *Convolutus*, turned inwards.

7. *Revolutus*, turned back after having made half a turn.

Tenuis is put both for *Slender* and *Thin*. *Tenuifolia planta*. A plant with narrow leaves.

Teres. Without angles. It may often be ſafely expreſſed in Engliſh by *Round*. Since we cannot well preſerve the Latin term, it is more accurate to tranſlate it by *Columnar* than by *Cylindric*. For ſtems and branches, leaves, petioles, and peduncles, to which it is applied, reſemble the ſhaft of a column, tapering gradually from the bottom upwards. *Allium vineale* and *oleraceum* are inſtances of columnar leaves.

Tertiuſculus. Almoſt or inclining to columnar.

Semiteres is Semicolumnar. Flat on one ſide and round on the other.

Tergeminum *folium*. A Tergeminate or thrice-double leaf. *Petiolus bifidus utroque apice foliola*

duo

duo & insuper foliola duo ad divaricationem petioli communis. — When a forked petiole is subdivided, having two leaflets at the extremity of each subdivision; and also two other leaflets at the division of the common petiole. Thus I understand it, though the explanation given above from *Delin. pl.* does not express as much; because it is a species of the Super-decompound leaf, the essence of which I apprehend to consist in its dividing thrice at least.

TERMINALIS. Terminating, or coming out at the end of a branch or stem. Applied to scape, peduncle, flower, spike, cyme, anther, awn, and thorn. Opposed to axillary.

TERNA *folia.* Three-fold leaves, in threes, or three and three: expressing the number of leaves in each whirl or set. As in *Statice sinuata.* See *Stellata.*

Terni pedunculi. Peduncles in threes, or three together from the same axil: as in *Impatiens zeylanica.*

Terni flores. Flowers growing three and three together: as in *Beta Cicla.*

TERNATUM *folium.* A Ternate leaf. Having three leaflets on one petiole: as in *Trefoil,*

Straw-

Strawberry, *Bramble*, &c.—Linneus makes it a ſpecies of the *Digitate*.

Doubly-ternate. See *Biternate*.

Triply-ternate. See *Triternate*.

TESSELATUM *folium*, *petalum*. A Teſſelate or chequered leaf or petal. Painted or ſpotted like a cheſs-board. — For the leaf, Linneus refers to *Satyrium repens*, and *Cypripedium bulboſum*: and as an inſtance of a flower, we may cite *Fritillaria Meleagris*.

TETRADYNAMIA (*τέσσαρες four*, and *δύναμις power*). The name of the fifteenth claſs in the Linnean ſyſtem; comprehending thoſe plants which bear hermaphrodite flowers with ſix ſtamens, four of them (more powerful) longer than the other two. This is a truly natural claſs, and the ſame with the *Cruciformes* of Tournefort—the *Siliculoſæ* and *Siliquoſæ* of Ray; which laſt are the names of the orders into which the claſs is divided by Linneus.

TETRAEDRA *ſiliqua*. A four-ſided ſilique or pod.

TETRAGONUS *caulis*. A four-cornered ſtem.—Having four prominent longitudinal angles:

as in *Passiflora alata.* A species of the *Anceps*, according to Linneus in *Philos. bot.*

Tetragynia (τεσσαρες and γυνη). One of the orders in several classes of Linneus's system; comprehending those plants which have four pistils.

Tetrandria (τεσσαρες and ανηρ). The fourth class in the Linnean system; comprehending those plants which have hermaphrodite flowers with four stamens of equal lengths.

Tetrapetala *corolla.* A tetrapetalous or four-petalled corolla. Consisting of four distinct petals: as in the class *Tetradynamia.*

Tetrphayllus *calyx.* A four-leaved calyx. Consisting of four distinct leaves, or leaflets, as Linneus calls them. Exemplified in *Sagina, Epimedium*, and the class *Tetradynamia.*

Tetrasperma *planta.* A four-seeded plant. Producing four seeds in each flower: as in the *Asperifoliæ* and *Verticillatæ.*

Textura *vegetabilium.* The Texture of vegetables: consists of *Vasa succosa;* succiferous vessels: *Tracheæ aëriæ;* Tracheæ or air-vessels: and

and *Utriculi ſecretorii*; Utricles, or ſecretory veſſels. See *Veſſels*.

THALAMUS. See *Receptaculum*.

THORN or Spine. *Spina*. A ſharp proceſs from the woody part of a plant, for its defence; as in *Prunus*, *Cratægus*, &c. See *Prickle*. It commonly diſappears by culture; as in *Pear*, *Orange*, &c.

A Thorn may be either — *Terminating*; placed at the end of a branch or leaf: or *Axillary*; proceeding from the angle formed by a branch or leaf with the ſtem.

Foliary, or growing on the leaf.

Calycine, or growing on the calyx.

Simple or *Single*—*Divided* or *Branched*.

Aloe has thorns at the edges of the leaves.

Thiſtle has them on the calyx.

Many fruits are protected by them: as *Trapa*, *Tribulus*, *Spinacia*, *Datura*, &c.

THORNY. *Spinoſus*. Set with thorns: as the ſtem of many ſhrubs.—A Thorny leaf. *Folium ſpinoſum*. Running out at the edge into hard, ſtiff, ſharp points. Oppoſed to *Inerme*.—Sometimes a petiole, ſtipule, or bracte, becomes hard and ſharp: it is then ſaid to be *Spineſcens*, Spineſcent, or to become thorny.—This, though

6 a very

a very different idea, has been sometimes confounded with *Spinosus*.

Thread-shaped. See *Filiform*.

THREE-CAPSULED Pericarp. *Tricapsulare Pericarpium.* Having three capsules succeeding to each flower: as in *Veratrum, Delphinium.*

THREE-CELLED Pericarp. *Triloculare Pericarpium.* Divided into three cells within: as *Lilium.*

THREE-CLEFT. *Trifidus.* Divided into three parts by linear sinuses with straight margins.—Applied to the Leaf in *Reseda lutea*—to the Calyx in *Alisma, Cliffortia*—to the Nectary in *Nigella*—to the Stigma in *Amaryllis formosissima*—to the Cirrus, &c.

Three-cleft-palmate leaf. *Folium trifido-palmatum.* A Palmate leaf with only three divisions.

THREE-CORNERED or Three-edged. *Trigonus.* A species of the *Anceps* or ancipital stem, according to Linneus; who says, *Anceps angulos duos oppositos habet.*—*Caulis trigonus* therefore should have three opposite angles, which is impossible.—This term is explained by Berkenhout to be three-sided, with the sides either concave

concave or convex—by Withering, as having three angles, and the ſides not flat—by the Lichfield Society, as having three prominent longitudinal angles; which agrees nearly with the explanation in *Term. bot.*—hollowed longitudinally with three angles. See *Three-ſided.*

THREE-FLOWERED Peduncle. *Triflōrus Pedunculus.* Bearing three flowers together.

Three-fold leaves. See *Terna.*

THREE-LEAVED calyx. *Triphyllus.* Conſiſting of three diſtinct leaflets: as in *Tradeſcantia.*

THREE-LOBED leaf. *Folium trilobum.* Divided to the middle into three parts, ſtanding wide from each other, and having convex margins: as in *Leonurus Cardiaca, Reſeda odorata.*

THREE-NERVED leaf. *Folium trinervium.* Having three diſtinct veſſels or nerves running longitudinally without branching.

THREE-PARTED leaf. *Folium tripartītum.* Divided into three parts down to the baſe, but not entirely ſeparate; as in *Eryngium campeſtre.* —Applied alſo to the Cyme.

THREE-PETALLED or *Tripetalous corolla. Tripe-*

tăla.

tala. Consisting of three distinct petals; as in *Alisma, Sagittaria.*

THREE-SEEDED capsule. *Trisperma.* Containing three seeds: as in *Euphorbia.* Applied also to the Berry.

THREE-SIDED stem. *Triquĕter caulis.* Having three *plane* sides: as in *Viola tricolor.*—Culm, in *Carex.*—Leaf, in *Anthericum ossifragum.* Applied also to the scape, petiole, peduncle, and pericarp.

THREE-VALVED pericarp. *Trivalve pericarpium.* Opening with three valves: as in *Viola, Polemonium, Cistus Helianthemum.*

Throat. See *Faux.*

THYRSUS (Θυρσος, from θυω, *impetu feror, erumpo,* to burst forth. Put for branches, or the flame of a lamp or torch; which have a conical form. Hence the spear with ivy bound about the head, carried in sacrifices to Bacchus, was named *Thyrsus).* A Thyrse. Linneus puts it for a species of inflorescence; and explains it to be, a panicle contracted into an ovate form, as in *Syringa* and *Petasites.*

TOMENTOSUS (*Tomentum*, nap, cotton, or flocks, from τεμνω; or, as others think, from *tumeo*, to ſwell up; being uſed to ſtuff pillows, bolſters, &c. It is properly the ſhort wool that is not carded and ſpun; and was applied to the nap on the leaves of ſome plants, which was uſed for the ſame purpoſe. Hence *Gnaphalium* from γναφαλον, which has the ſame ſignification). Tomentoſe; or, if we muſt tranſlate the term—Nappy, Cottony, or Flocky. It is applied to the ſtem and leaf, when they are covered with hairs ſo interwoven as ſcarcely to be diſcernible: and is a ſpecies of pubeſcence. It is generally white, as on ſea plants, and ſuch as grow in expoſed ſituations. Exemplified alſo in *Ceraſtium tomentoſum*, *Origanum Onites*, *Althæa officinalis*, *Ciſtus incanus*.

TONGUE-SHAPED leaf. *Folium linguiforme*. Linear and fleſhy, blunt at the end, convex underneath, and having uſually a cartilaginous border: as in ſome *Aloes*, *Meſembryanthemum linguiforme*, *Hæmanthus coccineus*.

Toothed. See *Dentatum*.

Toothed a little, or ſomewhat toothed. *Subdentatus*. Having very few teeth.

Tooth-

Toothletted. Denticulatus. Having very ſmall teeth.

Tooth-ſerrate. Dentato-ſerratus.

Tooth-ſpined. Dentato-ſpinoſus: as in *Agave.*

Top-ſhaped. See *Turbinatum.*

Torn. See *Lacera.*

TOROSUS. Toroſe, ſwelling out in knobs; like the veins and muſcles. Applied to ſome ſiliques; and other pericarps, as *Lycoperſicum, Phytolacca.*

Torulōſus. Swelling a little.

Torſio (*Torqueo,* to twiſt). *Directio plantæ in unam alteramve plagam a verticali diverſam.*—Delin. pl. See *Intorſio.*

TORTILIS, *Tortuoſus, Tortus.* Twiſted, or twiſting.—*Tortilis ariſta.* A twiſted awn. *Flexa funis inſtar.* Coiled like a rope.—*Tortuoſum folium.* A twiſted leaf: as in *Narciſſus major.*—*Torta* or *Contorta* corolla. A twiſted corolla: as in *Nerium, Aſclepias, Vinca.*—*Tortum legumen.* A twiſted legume. When the apex is not in the ſame line with the baſe.

TRACHEÆ. Air-veſſels. *Vaſa aërem attrahentia.* Philoſ. bot.—*Canales ſpirales aëri recipiendo & diſtribuendo nati.* Regn. veg. Spiral channels in vegetables for receiving and diſtributing air. See *Veſſels.*

Trailing. See *Procumbens.*

TRANSVERSUM *diſſepimentum.* A Tranſverſe partition. The ſame with *Contrarium.* At right angles with the valves of the pericarp, in the ſilique. Oppoſed to *Parallel.* See *Partition.*

TRAPEZIFORME *folium.* A leaf having the ſhape of a *trapezium*, or plane figure with four unequal ſides.

TREE. *Arbor.* A Vegetable with a ſingle woody trunk.—Trees (in Linneus's *Regnum Vegetabile*) occupy the fifth tribe, diviſion, or caſt of the Vegetable kingdom.—In the artificial ſyſtem they are incorporated with herbs that have the ſame character of the fructification. Ray and Tournefort kept them ſeparate, but Rivinus had united them before Linneus.

TRIANDRIA (τρεις, *three*, and ανηρ, *a huſband*). The name of the third claſs in the Linnean ſyſtem, comprehending thoſe plants which bear

herma-

hermaphrodite flowers with *three* ſtamens.— The ſecond order *Digynia* contains moſt of the Graſſes.

TRIANGULARIS *caulis*. A triangular ſtem. *Ex numero angulorum prominentium.* A ſtem is called Triangular, Quadrangular, &c. from the number of prominent angles. In theſe terms reſpect is had only to the number of angles.— *Trigonus*, *Tetragonus*, &c. are variations of the *caulis anceps*, in which the angles are ſharp, and the ſides not flat. — *Triqueter* muſt have three flat ſides.

Triangulare folium. A triangular leaf. *Cum tres anguli prominentes ambiunt diſcum.* This ſeems to me an inaccurate expreſſion; for how angles can ſurround a diſk I do not underſtand. I apprehend Linneus to mean no more, than that every leaf having three angles in the circumference, is a Triangular leaf, whatever its form may be in other reſpects.

TRIBUS *vegetabilium.* Tribes of vegetables, are reckoned to be three, in *Regn. veg.*

1. *Monocotyledones*, containing Palms, Corn, and Graſſes, Liliaceous plants; the three firſt *Gentes* or Nations.

2. *Dicotyledones*, comprifing Herbs and Trees; the fourth and fifth Nations.

3. *Acotyledones*, or Cryptogamia: the Ferns, Moffes, Algas, and Funguffes; which are the four laft Nations.

Trichotomus *caulis*. A Trichotomous ftem. Dividing by threes.

Tricocca *capfula*. A Tricoccous or three-grained capfule. Swelling out in three protuberancies, internally divided into three cells, with one feed in each: as in *Euphorbia*. Hence

Tricoccæ, the name of the forty-feventh order in Linneus's fragments, and of the thirty-eighth in his natural orders.

Tricuspidatum *ftamen*. A three-cufped or three-pointed ftamen: as in fome fpecies of *Allium*. See *Cufpidatum*.

Trifidus. See *Three-cleft*, *Cleft*, and *Fiffum*.

Triflorus *pedunculus*. A three-flowered peduncle. Bearing three flowers.

Triglochis. See *Glochis*.

Trigonus. See *Three-cornered* and *Triangularis*.

TRIGYNIA (τρεις and γυνη, *a wife*). The name of the third order in the first thirteen classes of the Linnean system, except the first, fourth, and seventh; including those plants which have three pistils to each flower.

TRIHILATÆ (Three-scarred, see *Hilum*). The name of the fiftieth order in Linneus's fragments; and of the twenty-third in his natural orders.

TRIJUGUM *folium*. A Trijugous leaf. A pinnate leaf with three pairs of leaflets.

TRILOBUM *folium*. See *Three-lobed*.

TRILOCULARE *pericarpium*. See *Three-celled*.

TRINERVE *folium*. A three-nerved leaf. Having three nerves or unbranched vessels meeting *in* the base of the leaf.

Trinervatum. Having them meeting *behind* or *beyond* (ponè) the base.

Triplinerve. In which they meet *above* (supra) or short of the base.

I must confess that I do not see how these terms are expressive of such distinctions; which are given in *Term. bot.*—I should have conceived

that by the laſt of them we were to underſtand, a leaf having three-fold nerves, or running three and three together: and thus Dr. Berkenhout has explained it.

TRIOECIA (τρεις and οικος, *a houſe*). The name of the third order in the claſs *Polygamia*; and ſignifying that there are hermaphrodite, male and female flowers of the ſame ſpecies on three diſtinct individuals.

TRIPARTITUS. See *Three-parted.*

TRIPETALA *corolla.* See *Three-petalled.* Hence

Tripetaloideæ. The name of the ſixth order in Linneus's fragments; and of the fifth in his natural orders.

TRIPHYLLUS *calyx.* See *Three-leaved.*

TRIPINNATUM *folium.* A Tripinnate, or three times pinnate leaf. A ſpecies of Superdecompound leaf; when a petiole has bipinnate leaves ranged on each ſide of it: as in common Fern, *Pteris aquilina.*

Triplinerve. See under *Trinerve.*

TRIQUETER f. *Triquetrus caulis—latera tria plana obtinet.* See *Three-ſided.*

TRISPERMA *capsula, bacca.* See *Three-seeded.*

TRITERNATUM *folium.* A Triternate, or triply-three-fold leaf. A species of Superdecompound leaf, when a petiole has three biternate leaves.—*Cum petiolus affigit tria foliola biternata.*

TRIVALVE *pericarpium.* See *Three-valved.*

TRIVIALIA *nomina.* Trivial names. The common or vulgar names for the species of plants, which added to the name of the genus, form a complete denomination of the species. These were invented by Linneus, and first used in the *Pan suecus*; afterwards in the *Species Plantarum*, and thenceforward in all his other works. Antecedent to this, what we now call the *Diagnosis* or *Specific character* seems to have been considered as the *Specific name*, which see.

TROPICI *Solares flores.* Tropical Solar flowers. *Mane aperiuntur, & ante vesperam excluduntur quotidie, sed hora explicationis adscendit vel descendit, uti dies adcrescit aut decrescit; adeoque observant horas Turcicas s. inæquales.* See *Vigiliæ.*

TRUNCATUM *folium.* A Truncate leaf. — *Quod linea transversali desinit.* Ending in a transverse

verse line—so that it seems as if the tip of the leaf had been cut off. The *Tulip-tree* is a remarkable instance of this. This term is applied also to the Petal—and to the Nectary, in *Narcissus Tazetta*.

TRUNCUS. Anciently, and in common English, *Trunk* is put for the stem, body, stock, or bole of a tree: for which Linneus uses the word *Caudex*. He applies *Truncus* to the stem or main body of vegetables in general; and explains it to be—that which produces the leaves and fructification; or, the organ multiplying the plant. The stem or trunk of herbs he names *Caulis*. When it elevates the fructification, and not the leaves, he calls it *Scapus*, Scape or Shaft. The stem of Corn and Grasses, having a peculiar structure, he names *Culmus*, Culm or Straw. *Stipes* is the base of a Frond; or a stem passing into leaves, or not distinct from the leaves.

Tuber. A knob, in roots. *Solidus particulis indiscretis*. Solid, with the component particles all similar.—It is also the Latin name for the *Truffle*.

TUBERCULUM (dimin. from *Tuber*). A little knob, like a pimple.—*Fructificatio constans punctis scabris*

ſcabris ex pulvere quaſi congeſtis. A little knob, or rough point, on the leaves of ſome *Lichens*, ſuppoſed to be the fructification. – Hence ſuch are ſaid to be Tubercled, *Tuberculati.*

TUBEROSA *radix.* A Tuberous or knobbed root. *E partibus carnoſis filo baſi connexis conſtans*—*ſ. ſubrotundis corporibus in faſciculum collectis.*— Conſiſting of roundiſh fleſhy bodies, or Tubers, connected into a bunch by intervening threads. As in *Pæonia, Hemerocallis, Filipendula, Jeruſalem Artichoke, Potatoe.*

TUBULATUS *calyx.* A tubular calyx. Running into the form of a tube. — Applied to the Corolla, in the claſs *Didynamia*—and to the Nectary of *Hellebore.*

TUBULOSUS *flos.* A Tubulous compound flower, compoſed wholly of tubulous florets. The ſame with *Floſculoſus flos* of Tournefort. Exemplified in *Tanſey*, and other naked diſcous flowers.—*Tubuloſus floſculus.* A tubulous floret. Having a bell-ſhaped border, with five reflex ſegments, riſing from a tube. Theſe are the regular-ſhaped little component flowers in the diſk of Compound flowers: as in the *Sun-flower, Daiſy*, &c.—*Tubuloſus caulis.* A hollow ſtem.

—*Tubu-*

—*Tubulosum folium.* A hollow leaf: as in *Onion.*

TUBUS. A Tube or hollow pipe. Put for the lower, narrow, hollow part of a monopetalous or one-petalled corolla, by which it is fixed into the receptacle. Vaillant and Haller call the style *Tuba*, from its resemblance to a trumpet.

TUNICATUS *bulbus.* A tunicated or coated bulb. *Tunicis numerosis constans.* Composed of numerous concentric coats; as the *Onion.* — *Tunicatus caulis.* A tunicated stem. *Membranis vestitus.* Clothed with membranes.

TURBINATUM (*Turbo*, a top). Turbinate, or top-shaped. *Basi angustatum.* Philos. bot.—*Obverse conicum.* Delin. pl.—Narrowed at the base, or inversely conical. Shaped like a boy's top, or a pear. Applied commonly to the Germ and Pericarp. — Also to the Perianth, as in *Grislea*, *Memecylon*—and to the Nectary, in *Narcissus Bulbocodium.*

TURGIDUM *legumen.* A Turgid or swollen legume or pod: as in *Ononis.*—Thought by some to be the same with *Inflatum*; but in the latter I apprehend the pericarp to be in substance as well as form somewhat like a blown bladder; whereas

whereas in the former it is merely more ſwelled out, and has a wider cavity than is uſual.

Turio (q. terio, *quia facile teratur*; as *tugurium*, q. *tegurium* from *tego*, or q. *tenerio* from *tener*.—How Dr. Berkenhout came to derive it from *Tyro*, a novice, I am at a loſs to conceive). This word is uſed by Columella for the extreme twig or young ſhoot of a tree. I do not find it in *Philoſ. bot.*—*Termini Botanici*—or *Delin. pl.*—Giſeke makes it ſynonymous with *Stolo*.—Dr. Berkenhout ſays it is the *Gemma* ſo called, by Ludwig, when proceeding from the root.—Ray, whoſe ideas and expreſſions are ever claſſical, ſays: *Tenella arborum, fruticum aut herbarum cacumina, quaſi teneriones; vel, ut Voſſius vult, quia facile teruntur.*—Leers explains *Turiones* to be—*tenellæ plantarum ſoboles, verno tempore cum foliis e terra erumpentes: ut Aſparagus, Humulus.* The tender ſhoots of plants which come up in the ſpring; as in the Aſparagus and Hop. Such are called *Aſparagi*; the tender ſprouts or ſhoots of any herb from the ground. Ray thus explains the word Aſparagus:—*dicitur primum germen herbarum quod edendo eſt vel oleris cujuſque turio antequam in folia explicatur, α σπειρω.*

Twin

Twin anther. *Didyma anthera.* Swelling out into two protuberancies: as in *Ranunculus*, *Mercurialis.*—Applied alſo to Germ and Pericarp; as in *Veronica.*

Twining ſtem. *Caulis Volubilis.* Aſcending ſpirally round a branch, ſtem, or prop. This is done either from right to left, contrary to the ſun's apparent motion, as in *Hops*, *Honeyſuckle*, *Black Bryony*, &c. or from left to right, with the ſun, as in *Convolvulus*, *Baſella*, *Phaſeolus*, *Cynanche*, *Euphorbia*, *Eupatorium.*

In order to underſtand this, we muſt conceive the ſpectator to ſtand with his face towards the ſouth, when of courſe the eaſt will be towards his left hand. Thus ſtationed, if he obſerves a ſtalk of *Convolvulus* or *Kidney Bean*, he will ſee that it twines from the left or eaſt, by the ſouth, towards the weſt; and that a *Honeyſuckle* or *Hop* takes a contrary direction. —Who will reveal the cauſe of this difference?

Twisted. See *Tortilis.* If we are to make any difference between this and *Coiled*, I ſhould conceive the deviation of the latter to be in the ſame plane, and that of the former to be in different planes.

Two-

Two-capsuled. See *Bicapsular.*

Two-celled. See *Bilocular.* This term however is to be preferred to that; since we use the word *Cell* in English.

Two-cleft, or Bifid. See *Cleft.*—*Utricularia* is an instance of the two-cleft perianth.

Two-edged or Ancipital. See *Anceps.*

Two-faced leaves. See *Bifarious.*

Two-flowered peduncle. *Pedunculus biflorus.* Proceeding simple from the stem or branch, but bearing two flowers at the end.

Two-fold leaves. *Bina folia.* Two and two together, from the same place, or at the same joint. See *Bina* and *Binate.*

Two-forked. See *Dichotomous.*

Two-horned. See *Bicornes.*

Two-leaved calyx. *Diphyllus.* As *Papaver, Fumaria.* Applied to the Tendril—and to the Peduncle in *Gomphrena.*

Two lipped corolla. *Bilabiata.* As in *Pinguicula*, and most flowers of the *Didynamia* class.

Two-lobed leaf. *Bilobum folium.* See *Lobatum.*

Two-parted leaf, perianth. *Bipartitum folium, perianthium.* Divided in two down to the base.

Two-petalled corolla. *Dipetala.* As in *Circæa, Commelina.*

Two-ranked or Two-rowed. See *Distichus.*

Two-seeded fruit. *Dispermus fructus.* Containing two seeds. — *Disperma planta.* Having two seeds to each flower: as in Umbellate and Stellate plants.

Two-valved pericarp. *Bivalve pericarpium.* As in *Chelidonium,* and all Siliques and Legumes. —Two-valved glume. *Gluma Bivalvis:* as in the calyx and corolla of most Grasses.

V

VAGINA. A Sheath, or membrane investing a stem. Hence

VAGINALES. The name of the twenty-seventh order in Linneus's fragments of a natural method in his *Philosophia Botanica*.

VAGINANS *folium*. A Sheathing leaf. See *Sheathing*.

VAGINATUS *caulis*. A sheathed stem. See *Sheathed*.

VALVA s. VALVULA. A Valve, Valvelet, or Valvule. But there seems to be no occasion to use the diminutives in English; for Linneus makes no distinction between *valva* and *valvula*. He uses *valvula capsulæ*, and *valva glumæ*; but more frequently the diminutive.—Valvula —*paries quo fructus tegitur externe*. The outer coat, shell or covering of a capsule or other pericarp; or the several pieces which compose it. There seems to be an impropriety in explaining *valvula* by *paries*: it is rather the door or opening by which the seeds are to go out

or efcape. If a pericarp is entire, it is faid to be *univalve*, or to confift of one valve. If it is divided, according to the number of pieces or divifions, it is called *bivalve* or two-valved; *trivalve* or three-valved, &c.

The leaflets compofing the calyx and corolla in Graffes are alfo named *Valves*: as are alfo the fubftances or fcales which clofe the tube in fome flowers: as in *Borage* and other *Afperifoliæ.*

Valvatum petalum. A valved petal. Refembling the glume in Graffes.

VARIETAS. A Variety. *Eft planta mutata a caufa accidentali.—Varietates tot funt, quot differentes plantæ ex ejufdem fpeciei femine funt productæ.—Species varietatum funt*, Magnitudo, Plenitudo, Crifpatio, Color, Sapor, Odor.—*Philof. bot.*—A plant changed by fome accidental caufe.—There are as many Varieties as there are different plants produced from the feed of the fame fpecies.—Varieties are *Size, Fulnefs, Curling, Colour, Tafte*, and *Smell.*

In *Delin. pl.* it is expreffed more fully, thus —*Variation* is a change in fome lefs effential part or quality; as colour, fize, pubefcence, or age.—Externally; by the plaiting or interweav-

ing of the branches—by bundling or uniting of ſeveral ſtalks into one broad flat one—by the greater breadth, or narrowneſs, or curling of leaves—by becoming awnleſs, or ſmooth, or hirſute.

Internally; by becoming mutilated in the corolla; or having one larger than ordinary—by luxuriancy, multiplication, or fulneſs—by becoming proliferous, or creſted—by bearing bulbs inſtead of ſeeds—or by being viviparous.

The uſual cauſes of Variation are, Climate, Soil, Expoſure, Heat, Cold, Winds, Culture.

VASA. Veſſels.—*Conſtant Vegetabilia triplicibus Vaſis.* 1. Succoſa *liquorem vehunt.* 2. Utriculi *alveolis ſuccum conſervant.* 3. Tracheæ *aërem attrahunt.* Philoſ. bot.

In *Regn. veg.* it ſtands thus—

Vaſa *canales ſuccis per eos promovendis repleti, plerumque recti.*

Tracheæ *canales ſpirales aëri recipiendo & diſtribuendo nati.*

Utriculi *ſacculi pulpa utplurimum viridi pleni, vaſorum interſtitia explentes.*

Here *Vaſa* is put for the Succiferous veſſels only. See *Veſſels.*

VAULTED. *Fornicatus.* Arched like the roof of the mouth: as the upper lip of many Ringent flowers; in *Aconite*, &c.

VEGETABILE. A Vegetable. — *Vita composita, absque motu voluntario.* Regn. veg.—Compound life, without voluntary motion.—Otherwise defined to be—an Organical body, which draws in its nourishment by pores or vessels on its outer surface.—Or, an Organical body destitute of sense and *spontaneous* motion, adhering to some other body in such a manner as to draw from it nourishment, and having the power of propagating itself by seed.

The primary parts of a vegetable are—1. The Root. 2. The Herb. 3. The Fructification.

Vegetable Kingdom. The second of the three great divisions of natural bodies, comprehending all those substances which are organized and have life, but are destitute of sense and spontaneous motion. Linneus distributes vegetables into three Tribes, seven Families, or nine Nations. In his artificial system he arranges them in twenty-five classes. He has also made an essay to reduce them into Natural Orders.

Vegetable Substance. See *Substantia.*

Vege-

Vegetable Texture. See *Textura.*

Veil. See *Calyptra.*

VENOSUM *folium.* A Veined leaf. Having the veſſels branching, or variouſly divided, over the ſurface.

When it has no veins, at leaſt none that are perceptible to the naked eye, it is called *Folium Avenium,* a veinleſs leaf.

VENTRICOSUS. Ventricoſe. Bellied. Swelling out in the middle. *Ventricoſa ſpica : a lateribus gibba.* Swelling out at the ſides.—Applied to the Perianth, in *Æſculus*—and to the Corolla, in *Digitalis.*

Ventriculoſus. Swelling out a little: as the perianth of *Salicornia.*

VEPRECULÆ (From *Vepres,* a brier). The name of the fifty-fourth order in Linneus's fragments, and of the thirty-firſt in his natural orders.

VERNATIO (From *Ver,* the Spring). See *Foliatio,* which is the term in *Philoſ. bot.* for which this is ſubſtituted in *Term. bot.* and *Delin. pl.*—In the two latter *Reclination* is omitted, and there is ſome difference in the explanations.

VERRUCOSA *capſula.* A warted capſule. Having little knobs or warts on the ſurface. As in *Euphorbia verrucoſa.*—*Verrucoſum folium.* A Warted leaf. *Tectum punctis carnoſis.* Covered with fleſhy points. The ſame with *Papilloſum.*

VERSATILIS (*Verto*, to turn) *anthera.* A Verſatile anther. *Quæ latere affigitur.* Which is placed on the filament by its ſide. Oppoſed to *Erecta*, Upright, which is fixed by its baſe. *Philoſ. bot.*—In *Delin. pl.* it is explained more fully thus—*Parte ſui affixa, ceterum libere mobilis.* Fixed by ſome part, but freely moveable. It is there made ſynonymous with *Incumbens.* See *Incumbent.*—Exemplified in *Vitex*, *Linnæa*, *Geranium.*

VERTICALE *folium.* A Vertical leaf.—In *Philoſ. bot.* the ſame with *Obverſum*, which ſee.—A vertically ovate leaf is the ſame with an obverſely-ovate or obovate leaf; and a vertically cordate leaf is the ſame with an obverſely cordate or obcordate leaf.—Here the form of leaves is conſidered, and it ſeems as if the baſe and apex had changed places.

In *Delin. pl.* the term *Verticale* appears in that ſection which ſets forth the *Direction* of leaves; and ſince it is placed next after *Horizontale*, we are led to ſuppoſe that it is uſed in oppoſition to that term; but the words of the

expla-

explanation will not admit of that ſenſe; nor have they any thing to do with the direction of a leaf. I conclude therefore that the term is miſplaced. — The words are theſe, *Obverſum, ut regio baſis anguſtior evadat regione apicis.* A Vertical leaf is Obverſe, ſo that the region of the baſe becomes narrower than the region of the tip; which is nearly the ſame with Linneus's explanation of *obverſum*.

After all, I do not ſee what the term *Vertical* can have to do with the ſhape of a leaf; and if it had preſented itſelf to me in company with *Horizontal*, I ſhould have ſuppoſed that the latter term implied a poſition of the leaf's ſurface parallel to the horizon; and the former perpendicular to it.

VERTICILLUS (ſ. *Verticulus*, a *verto*. Inſtrumentum quod fuſo adhibetur, ut facilius vertatur. *Plinius*). Anglice *Whirles* dicimus, ſays Ray. It is commonly written *Whorl*; but *Whirl* ſeems to be the proper orthography, ſince it muſt be derived from the verb *to Whirl*, which ſignifies to turn round rapidly.

Linneus puts this term for a ſort of infloreſcence made up of many ſubſeſſile flowers ſurrounding the ſtem in a ring. *Fit ex floribus*

numerosis subsessilibus, caulem annulatim ambientibus.—As in *Mentha Pulegium, Marrubium,* &c.

A Verticil or Whirl may be

1. Sessile or peduncled.
2. Naked; that is without involucre, bracte or bristle. Bracted—or Involucred.
3. Crowded. Distant—or Remote.—Hence

Verticillati flores. Verticillate flowers; or flowers growing in a Whirl; or round the stem in rings one above another at each joint.—It is applied to peduncles; and sometimes to branches and leaves.—Plants bearing flowers in this manner are styled

Verticillatæ. Verticillate plants. These are included in the fifty-eighth order of Linneus's fragments; and the forty-second of his natural orders. In the artificial system, they form the order *Gymnospermia* of the class *Didynamia.* They also constitute one of Ray's classes.

Vesicularis (*Vesicula,* a little bladder) *Scabrities.* Vesicular or bladdery ruggedness. Having little glands like bladders on the surface: as on the leaves of *Mesembryanthemum, Aizoon, Tetragonia,* &c.—

&c.—It is applied alſo, in common language, to the pulp of the *Orange*, *Lemon*, &c.

VESSELS. *Vaſa*—are, 1. *Succiferous* or *Sap veſſels.* Canals commonly ſtraight, and of a very ſmall bore, for conveying the liquor, juices, or ſap of the vegetable. Theſe are called *Vaſa* (κατ' ἐξοχην) in *Delin. pl.*

2. *Utricles*, or little Bags; uſually full of a green pulp, filling up the interſtices of the veſſels, and ſerving as reſervoirs wherein the ſap is lodged and perhaps ſecreted.

3. *Air veſſels.* Tracheæ. Spiral Canals, uſually of a larger bore, for receiving and diſtributing the air.

On this ſubject ſee the learned Grew's incomparable treatiſe on the *Anatomy of Vegetables.*

VEXILLUM. Standard or Banner. *Petalum corollæ Papilionaceæ ſuperius adſcendens; alis cariniſque incumbens.*

VIGILIÆ plantarum ſ. florum. *Status floris aperti.* The ſtate of the open flower.—*Abſolvuntur determinatis horis diei, quibus plantæ flores quotidie aperiunt, expandunt & claudunt.* Theſe *Vigiliæ* or Watchings are performed at determined hours

of

of the day, when plants open, expand, and ſhut their flowers daily.

Linneus calls thoſe flowers which obſerve this ſtated rule of opening and ſhutting *Solar flowers*; and divides them into three kinds.—

1. *Meteorici*. Opening and ſhutting ſooner or later, according to the temperature of the air.

2. *Tropici*, or Tropical Solar flowers. Opening and ſhutting ſooner or later as the days increaſe or decreaſe; and therefore obſerving the unequal or Turkiſh hours.

3. *Æquinoctiales*, or Equinoctial Solar flowers. Opening, and uſually ſhutting at certain determinate hours of the day; and therefore obſerving equal or European hours.

Linneus has given a table of theſe, with ſome obſervations, in *Philoſ. bot.* p. 273.

VILLOSUS. Villous. *Pilis mollibus pubeſcens.* Pubeſcent or covered with ſoft hairs. As the ſtem in *Tomex* and *Rhus*. The leaf in *Ulex europæus* or Furze, *Primula villoſa*, &c. The ſtigma.

VILLUS (From μαλλος—or *a velando*—or *a vellendo*—or from ιλλω for ειλω—or from *pilus*—or from *vinnus*, cincinnus molliter flexus—ſuch is the uncer-

uncertainty of derivation). It is interpreted—*pili collecti, ac flocci vestium*; collected hairs, the pile or nap of cloth.—In Linneus's idea, it seems to be soft close hairs, forming a fine nap or pile like velvet.

VIMEN (*a viendo*, from binding). *Virgultum lentum ac flexile, ad ligandum aptum.* A bending Twig or Wythe: slender and flexible, fit for binding.

VIRGATUS (*Virga* a rod, or wand) *caulis.* A rod-like or wand-like stem or branch.—*Ramusculis debilibus inæqualibus.* Shooting forth slender weak unequal rods or twigs: as in *Artemisia campestris.*

VIRGULTUM (q. *Virguletum*, a *Virgula*, dimin. a *virga*). Small twigs or Brushwood. Otherwise called *Cremium*, *a cremando*, from burning.

VISCIDUM (*Viscum* s. *viscus*, Birdlime: from Βισκος *Æol.* pro ἰξος) *folium.* A Viscid or clammy leaf. *Humore non fluido sed tenaci oblinitum.* Covered or besmeared with a tenacious juice: as in *Senecio viscosus.* Applied also to the Stem.

VISCOSITAS. Viscidity or Clamminess. The quality of tenacious moisture.

VIVI-

VIVIPARA *planta*. *Vivipărus caulis*. A Viviparous plant or ſtem. Producing its offspring alive: either by bulbs inſtead of ſeeds; or by the ſeeds themſelves germinating on the plant, inſtead of falling as they uſually do.—Exemplified in ſome ſorts of *Allium*, in *Polygonum viviparum*, and ſeveral of the *Graſſes*.

UMBELLA. An Umbel. *Receptaculum ex centro eodem elongatum in pedunculos filiformes proportionatos*. A receptacle ſtretching out into filiform proportioned peduncles from the ſame centre.—It is

1. Simple or undivided; as in *Panax*.

2. Compound: each peduncle bearing another little umbel or umbellule.—The firſt or larger ſet of rays conſtituting the *univerſal* umbel; the ſecond or ſubordinate ſet conſtituting the *partial* umbel.

3. Proliferous or ſuperdecompound.

An Umbel alſo is

1. Concave. 2. Convex. 3. Faſtigiate, or riſing gradually like the roof a houſe.

It is alſo either

1. Erect; or 2. Nodding.

Flowers

Flowers growing in this manner are called *Umbellati*, Umbellate or Umbelled flowers; by old authors *Umbelliferous*. Hence

UMBELLATÆ. The name of the twenty-fecond order in Linneus's fragments; and of the forty-fifth in his natural orders. Included in the fecond order of the fifth clafs, in the artificial fyftem. This order is called by Ray and others *Umbelliferæ*; by Cæfalpinus *Ferulaceæ*.

UMBELLULA. An Umbellule or Umbellet. The fame with the Partial umbel.

UMBILICUS. The Navel. Ufed for the cavity at the end of fome fruits oppofite to the foot-ftalk. It is the place of the receptacle in fuperior flowers, and is commonly furrounded by the remains of the calyx: as in *Pyrus*.

It is fometimes applied to the centre of a corolla: as in *Browallia*.

Umbilicatus flos, fructus. An umbilicate flower or fruit. Formed in the middle like a navel.

UNANGULATUS *caulis*. A ftem of one angle: as in *Iris fœtidiffima*.

UNARMED. *Inermis.* Without thorns or prickles. Applied to the ſtem, leaf, and calyx.

UNCINATUS. Uncinate. Hooked at the end. As the awn of the ſeed in *Geum urbanum;* and the ſtigma in *Viola, Lantana,* &c. This term is uſed, but not explained by Linneus. In what it differs from *hamoſus* I know not.

UNDATUS, *Undulatus.* Waved. The ſurface riſing and falling in waves, or obtuſely; not in angles.—Applied to the leaf in *Potamogeton criſpum;* and to the corolla, in *Glorioſa.*

Linneus, in *Philoſ. bot.* has only the ſecond of theſe terms, which he applies to a leaf thus —*folium undulatum fit, cum diſcus verſus marginem convexe adſcendit & deſcendit.*—In *Term. bot.* we meet only with the firſt, thus explained —*diſco plicis obtuſis alternatim flexo.*—In *Delin. pl.* both terms occur. But I do not apprehend that they are uſed in different ſenſes any more than *patens* and *patula, valva* and *valvula,* &c.

UNDERSHRUB. See *Suffrutex.*

UNEQUAL. *Inæqualis.* The parts not correſponding in ſize, but in proportion only. Applied

to the corolla; and to the florets in many of the *Umbellatæ*.

UNGUICULARIS *menfura* f. *Unguis*. A meafure of fix lines, or half a French inch.

UNGUICULATUM *petalum*. A petal with a claw.

UNGUIS. See *Meafures*.—A Claw. The bafe of the petal in a polypetalous corolla.

UNGULATA *filicula*. A Hoof-fhaped filicle: as in *Rofe of Jericho*.

UNICAPSULARE *pericarpium*. A Unicapfular pericarp. Having one capfule to each flower.

UNICUS. One only, fingle. *Unicum folium*. A fingle leaf on a ftem. — *Unicus flos*, fynonymous with *folitarius* in *Delin. pl.* Pedunculus folitarius, *qui unicus eft in loco*. Philof. bot. See *Single*.

UNIFLORUS *pedunculus*. A one-flowered peduncle.

UNILABIATA *corolla*. A one-lipped corolla, or a corolla of one lip.

UNILATERALIS *racemus*. A one-fided raceme. When the flowers grow only on one fide of the common peduncle.

UNILO-

Uniloculare *pericarpium*. A unilocular or one-celled pericarp—or of one cell.

Univalve *pericarpium*. A univalvular or one-valved pericarp.

Universalis *umbella*. A Univerſal or primary umbel.—*Univerſale involucrum*. A Univerſal involucre. Placed at the foot of the univerſal umbel.

Volva. The membranaceous calyx of a Fungus.—This is ſaid to be—*Approximating* when it is near the cap. *Remote*, when at a diſtance.

Volubilis. Twining: which ſee.

Upright or Erect. *Erectus*. See *Erect*.

Urceolatus. Pitcher-ſhaped. *Urceoli f. pelvis inſtar inflatus & undique gibbus*. Bellying out like a pitcher. Applied to the calyx, corolla, and nectary.

Urens. Stinging, or armed with ſtings.

Utriculi (dimin. from *Uter*, a wine-bag or bottle). Utricles. Reſervoirs to ſecrete and receive the ſap. See *Veſſels*.

WAKING

W

WAKING or *Watching* of plants. See *Vigiliæ*.

Wand-like or Rod-like ſtem. See *Virgatus*.

Warted. See *Verrucoſa*.

Weapons. See *Arms*.

WEDGE-SHAPED leaf. *Folium cuneiforme*. Having the longitudinal diameter exceeding the tranſverſe one, and narrowing gradually downwards: as in *Apium graveolens*, *Saxifraga tridactylites*.

WHEEL-SHAPED corolla. *Rotata*. Monopetalous, and expanded flat without any tube.

WHIRL, Wherl, or Whorl. See *Verticillus*.

WINGS. *Alæ*. The two ſide petals in a papilionaceous corolla.—Alſo, membranes affixed to the ſeed.

Winged petiole. *Alatus*. Having a thin membrane or border on each ſide; or, dilated on

the ſides: as in *Orange.*—*Winged leaf.* See *Pinnatum.*

Withering or Shrivelling. Decaying without falling off. See *Marceſcens.*

Wood. *Lignum.* The ſolid part of the trunk, formed gradually from the inner bark of the preceding year, become juiceleſs, hardened, and agglutinated.

Woody ſtems. Oppoſed to herbaceous.

Wool. *Lana.* A ſort of pubeſcence, or a clothing of denſe curling hairs on the ſurface of ſome plants.

Woolly. *Lanatus.* Clothed with a pubeſcence reſembling wool: as the leaves of *Horehound, Great Mullein, Furze,* &c. See *Lanatus.*

Woollyiſh. *Sublanatus.*

Wrinkled. See *Rugoſum.*

Writhed. *Contortuplicatus.* Twiſted very much. See *Tortilis.*—I perceive this word to be confounded even by reſpectable writers, in or-

thography at leaſt, with *Wreathed*, which is of very different import.

WYTHE, or Withe. See *Vimen*.

Z

ZIGZAG. Uſed by ſome Engliſh writers for *Flexuoſe*; which ſee.

THE END.

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